

(22,889.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. 813.

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WILLIAM
F. McKNIGHT, RAILROAD COMMISSIONERS OF THE
STATE OF ARKANSAS, APPELLANTS,

vs.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN
RAILWAY COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF ARKANSAS.

VOLUME III.

INDEX.

	Original	Print
Testimony of defendants in surrebuttal.....	4793	2083
Testimony of Walter Nash.....	4793	2083
D. L. McNew.....	4825	2098
Mord Roberts.....	4843	2106
K. P. Alexander.....	4955	2158
J. A. Simmons.....	4976	2168
Hubert F. Jernigan.....	5024	2189
D. Harston.....	5038	2195
A. Paulette.....	5059	2204
Carl R. Gray (recalled by complainant).....	5079	2213
H. R. V. Rosing (recalled by complainant).....	5089	2218
F. P. Johnson.....	5091	2219

	Original	Print
Stipulation of counsel agreeing that complainant may revise		
Exhibit No. 56.....	5152	2249
Testimony of T. A. Hamilton.....	5154	2250
Maurice Wright	5180	2262
Charles S. Ludlam	5189	2267
Complainant's exhibits to testimony	5235	2289
Exhibit 1—Map of the Missouri Pacific system (omitted in printing).....	5235	
2—Statement of track mileage, St. L., I. M. & S. Ry., December 31, 1907.....	5237	2290
3—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Arkansas for six months ending December 31, 1907.....	5239	2292
3a—Assessed value of property divided between freight and passenger traffic for six months ending December 31, 1907, and interest at various rates..	5256	2317
4—Bases for ascertaining the cost of State business....	5260	2320
5—Miscellaneous statistics relative to the business handled during six months ending Dec. 31, 1907..	5266	2327
6—Comparison of averages based upon statistics published in the last annual report to the Interstate Commerce Commission (1907), with averages based upon the business handled by the St. L., I. M. & S. Ry. Co. on its entire line and in the State of Arkansas for six months ending December 31, 1907	5269	2329
7—Assessment of the State board of railroad commissioners for the year 1907 (omitted in printing)..	5271	
7a—Assessment of the Arkansas board of assessors for the years 1907-8-9	5273	2329
8—Statement of the earnings and expenses of the St. L., I. M. & S. Ry. Co. in the State of Arkansas for six months ending June 30, 1907.....	5275	2332
8a—Assessed value of the property divided between the freight and passenger traffic for six months ending June 30, 1907, and interest thereon at various rates	5281	2340
8b—Assessed value of the property divided between freight and passenger traffic for the year ending December 31, 1907, and interest thereon at various rates	5284	2343
9—Map of the St. Louis Southwestern Railway lines..... (omitted in printing)..	5287	
10—Statement of number of miles operated by St. Louis Southwestern Railway Co.....	5289	2346
11—Statement of operating revenues, operating expenses, taxes, and rentals of the St. Louis Southwestern Ry. Co. for the year ending June 30, 1908..... (omitted in printing)..	5291	

INDEX.

III

Original Print

Exhibit 12—Statement of operating revenues, operating expenses, taxes, and rentals, showing results from handling State freight and passenger traffic after excluding revenues, expenses, taxes, and rentals for interstate freight and passenger traffic, and all of mail, express, and miscellaneous, for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5294	2348
12a—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, etc., for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5297	2353
13—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5299	2355
13a—Statement showing how the extra cost of handling State traffic in proportion to revenue is arrived at for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5302	2359
14—Miscellaneous traffic statistics for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5304	2361
15—Statement of assessed valuation of property in the State of Arkansas for year 1908, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5306	2362
16—Statement of assessed valuation of property in the State of Arkansas for the year 1909, and proportion assignable to State freight and passenger traffic on basis of the revenue for the year ending June 30, 1908—St. Louis Southwestern Ry. Co..	5308	2364
17—Bases used in dividing operating revenues between freight and passenger and between States—St. Louis Southwestern Ry. Co.....	5310	2366
18—Supplement A to circular 360—St. Louis Southwestern Ry. Co.....	5312	2367
19—Statement of ton-miles of commercial freight handled on all through and local trains in the State of Arkansas, etc., during month of October, 1908—St. Louis Southwestern Ry. Co.....	5320	2375
20—Miscellaneous train statistics, State of Arkansas, month of October, 1908—St. Louis Southwestern Ry. Co.....	5322	2377
21—Statement of gross revenue for year ending June 30, 1908, showing proportion accruing to Arkansas and percentage thereof to the total; also miscellaneous statistics—St. Louis Southwestern Ry. Co.....	5324	2380
22—Statement of operating expenses, taxes, rentals, and outside operations for year ending June 30, 1908—St. Louis Southwestern Ry. Co.....	5326	2382
23—Answer to Judge Hill's example.....	5330	2389

	Original	Print
Exhibit 24—(Also marked Exhibit 1)—Map of U. S. (omitted in printing).....	5333	
25—Employees' time-table, St. Louis Southwestern Ry. Co., in effect August 16, 1908... (omitted in printing).....	5335	
26—Statement of trans-state, interstate, and State freight handled during the month of October, 1907—St. Louis, Iron Mountain & Southern Ry. Co.....	5350	2391
27—Average rate of pay per hundred miles in freight service and per day passenger and switching service, as per schedule—Missouri Pacific Ry. Co....	5352	2392
28—Average price paid for various commodities in the year 1909 compared with the year 1898 and per cent. of increase—St. Louis, Iron Mountain & Southern Ry. Co.....	5354	2393
29—Average yearly actual and relative prices of commodities, report Bureau of Commerce and Labor, bulletin 75, March, 1908—St. Louis, Iron Mountain & Southern Ry. Co.....	5356	2395
30—Graphic chart showing taxes and comparative prices of cross-ties and 29 other materials, ten classes of railway labor, and rate of railway freight transportation—St. L., I. M. & S. Ry. system (omitted in printing) ..	5358	
31—Comparison of averages based upon statistics published by the Interstate Commerce Commission's bulletin No. 1, showing revenue and expenses of steam roads in the United States for six months ending December 31, 1907, with similar averages based on the operation of the St. L., I. M. & S. Ry. Co. for the same period.....	5360	2396
32—Statement of operating revenues, operating expenses, taxes, and outside operations for six months ending December 31, 1907—St. Louis Southwestern Ry. Co.....	5362	2397
33—Statement of operating revenues, operating expenses, taxes, rentals, and outside operations, showing results from handling State freight and passenger traffic, etc., for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co.....	5364	2399
34—Statement showing how extra cost of handling State traffic in proportion to revenue is arrived at for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co.....	5366	2401
35—Miscellaneous traffic statistics for six months ending Dec. 31, 1907—St. Louis Southwestern Ry. Co.	5368	2403
36—Contract between Missouri Pacific Ry. Co. and Pacific Express Co., May 1, 1886.....	5370	2404
37—Intrastate mileage rates in effect in 1907 in States mentioned, on commodities as listed.....	5376	2406
37a—Intrastate mileage rates in effect in 1907, in the States mentioned, on commodities as listed.....	5378	2407

INDEX.

V

	Original	Print
Exhibit 38—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing).....	5380	
39—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing).....	5382	
40—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing).....	5384	
41—Map of the Missouri Pacific Railway, Denver & Rio Grande Railroad, and others, dated June 30, 1909 (omitted in printing).....	5386	
42—Map of the Wabash system (omitted in printing)...	5388	
43—Map of the St. Louis Southwestern Railway Line (omitted in printing).....	5390	
44—Analysis, mail earnings in Arkansas, six months ending Dec. 31, 1907—St. Louis, Iron Mountain & Southern Ry. Co	5392	2410
45—Statement of gross earnings per mile of road—St. L., I. M. & S. Ry. Co.....	5394	2411
46—Statement of relative stocks of passenger trains in Arkansas, time-table of May 12, 1907.....	5396	2412
47—Statement of capital stock and dividends, fiscal years ending June 30, from 1904 to 1909, inclusive—St. L., I. M. & S. Ry. Co.....	5412	2421
48—Fixed and obligatory charges, fiscal years ending June 30, 1906 and 1907—St. L., I. M. & S. Ry. Co.	5414	2432
49—Western classification No. 47, effective November 1, 1909, page 5416 (omitted in printing).....	5416	
50—Class rates to Little Rock and Pine Bluff.....	5679	2432
51—Statement of rates from Memphis, Tenn., to towns named.....	5681	2433
52—Terminal handling of loaded cars on through trains, October, 1907—St. L., I. M. & S. Ry. Co.....	5683	2434
53—Statement of inbound train 55, etc. (omitted in printing)	5690	
54—Statement of intrastate freight traffic—St. L., I. M. & S. Ry. Co.....	5722	2447
55—Results of operation in intrastate traffic in Arkansas for six months ending December 31, 1907—St. L., I. M. & S. Ry. Co.	5724	2449
56—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co. in the State of Arkansas for the period of six months ending December 31, 1907, etc.	5726	2451
56a—Statement showing the results of operation on the St. L., I. M. & S. Ry. Co., as reported in Exhibit 56, after certain changes had been made in the passenger miles carried in Pullman cars	5737	2471
57—Statement of passenger traffic, St. L., I. M. & S. Ry. Co., State of Arkansas.....	5740	2474

	Original	Print
Exhibit 58—Statement showing revenue from State freight and passenger traffic under both current and inhibited rates for fourteen months ending December 31, 1909.	5742	2476
59—Statement of all loaded trans-state cars moved through the State of Arkansas for fifteen days, first to fifteenth, in October, 1908, showing actual time consumed and miles made within the State, compared with the schedule—St. L. S. W. Ry. Co.	5744	2479
60—Statement showing results of operating freight service in the State of Arkansas for the period of six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co.	5746 5760	2481 2489
Defendants' exhibits to testimony.		
Exhibit A—Statement of trans-state, interstate, and State freight handled during the month of January, 1909—St. L. S. W. Ry. Co.	5760	2489
B—Changes in the Commission's tariff since July, 1903, to April 15, 1908.	5762 5770	2500 2506
C—Statement.	5772	2508
D—Statement.	5778	2511
E—Answer to Judge Hill's queries on April 19, 1910.		
F—Comparative rates from Memphis to points on White River Branch of the St. L., I. M. & S. Ry. against rates for equal distance, Commission tariff No. 3 and court tariff.	5781	2513
G—Statement covering six months ending December 31, 1907, prepared in answer to request of Judge Hill, showing assumed revenues, etc.	5783	2514
H—Statement supplementary to Exhibit No. 33, prepared in answer to request of Judge Hill, showing operating expenses, taxes, rentals, etc., for six months ending December 31, 1907—St. L. S. W. Ry. Co.	5785	2515
I—Freight statistics, October, 1907—St. L., I. M. & S. Ry. Co.	5787	2516
J—Statement of freight operating expenses in Arkansas for the six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L., I. M. & S. Ry. Co.	5790	2519
K—Bases used in arriving at cost of local and through service and intrastate and interstate freight business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co.	5792	2521
L—Statement of passenger operating expenses in Arkansas for the six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L., I. M. & S. Ry. Co.	5801	2532

INDEX.

VII

	Original	Print
Exhibit M—Bases used in arriving at cost of intrastate and interstate passenger, mail, and express business in Arkansas for the six months ending December 31, 1907—St. L., I. M. & S. Ry. Co.....	5803	2533
N—Statement of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co....	5809	2540
O—Summary of revenue, net earnings, and expenses in Arkansas for six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L., I. M. & S. Ry. Co.	5811	2540
P—Freight statistics, October, 1908—St. L. S. W. Ry. Co.	5813	2541
Q—Statement of freight operating expenses in Arkansas for six months ending December 31, 1907, divided between local and through train service and between intrastate and interstate business—St. L. S. W. Ry. Co.....	5815	2544
R—Bases used in arriving at costs of local and through freight service and intrastate and interstate freight business in Arkansas for six months ending December 31, 1907—St. L. S. W. Ry. Co....	5817	2546
S—Statement of passenger operating expenses in Arkansas for six months ending December 31, 1907, divided between train and other costs and between intrastate, interstate, mail, and express business—St. L. S. W. Ry. Co.....	5826	2557
T—Bases used in arriving at costs of intrastate and interstate passenger and mail and express business in Arkansas for the six months ending December 31, 1907—St. L. S. W. Ry. Co.....	5827	2558
U—Statement of revenue, expenses, and net earnings in Arkansas for six months ending December 31, 1907, with miscellaneous earnings, etc.—St. L. S. W. Ry. Co.....	5832	2562
V—Summary of revenue, expenses, and net earnings in Arkansas for the six months ending December 31, 1907, divided between intrastate, interstate, mail, and express business—St. L. S. W. Ry. Co.....	5834	2562
W—Tonnage capacity of engines in freight service as shown by official time cards, etc.—St. L., I. M. & S. Ry. Co.....	5836	2563
X—Statement of station expenses—St. L. S. W. Ry. Co.....	5840	2565
Y—Statement of station expenses—St. L., I. M. & S. Ry. Co.....	5843	2567
Z—Comparison of revenue and expenses per train mile from the years ending June 30, 1897 and 1908, as shown by the Interstate Commerce Commission reports for those years.....	5846	2569
A ¹ —Freight conductors' wheel report—M. P. Ry. Co. (omitted in printing).....	5848	

	Original	Print
Exhibit B ¹ —Form of way bill—St. L., I. M. & S. Ry. Co. (omitted in printing).....	5851	
C ¹ —Graphic chart showing class rates from Memphis, Tennessee; St. L., I. M. & S. Ry. tariff compared with class rates from Memphis Bridge Junction, Arkansas; standard distance tariff No. 3 (omitted in printing).....	5853	
D ¹ —Graphic chart showing rates from St. Louis, Mo.— St. L., I. M. & S. tariff No. 5179a (omitted in printing)	5855	
E ¹ —Statement showing the ton miles and percentages of freight taken up on the company's books and records during the month of October, 1908, and the ton miles and percentages of freight actually transported during that month, as shown by Ex- hibits 19 and 20—St. L. S. W. Ry. Co.....	5857	2570
F ¹ —Freight and passenger statistics compiled from the reports of the Interstate Commerce Commission for the entire United States, group 8, St. L., I. M. & S. and St. L. S. W. Ry. Co. for the period of ten years ending June 30, 1907.....	5859	2571
G ¹ —Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L., I. M. & S. Ry. Co.....	5861	2573
H ¹ —Cost and net earnings of intrastate freight business in Arkansas for the six months ending December 31, 1907, etc.—St. L. S. W. Ry. Co.	5863	2574
I ¹ —Affidavit of E. K. Voorhees (part omitted in print- ing).....	5865	2576
J ¹ —Sketch showing main track in city limits of Fort Smith, Arkansas—St. L., I. M. & S. Ry. Co., etc. (omitted in printing).....	5880	
K ¹ —General instructions No. 16a of the Missouri Pa- cific Ry. Co. (omitted in printing).....	5885	
L ¹ —Graphic charts (" ").....	5886	
M ¹ —Graphic charts (" ").....	5897	
N ¹ —Railroad Commission standard freight distance tariff No. 3, in effect June 15, 1908 (omitted in printing)	5899	
Opinion of Judge Trieber, May 3, 1911.....	5957	2580
Stipulation to use testimony in both cases, etc.....	6077	2648
Order that court tariff remain in force pending appeal.....	6078	2648
Order of severance as to Henry Leigh and George L. McLean.....	6078	2649
Order allowing appeal, etc.....	6079	2649
Assignment of errors.....	6081	2650
Prayer for appeal and allowance of same.....	6088	2656
Bond on appeal.....	6090	2657
Order filing citation	6091	2658
Citation and acceptance of service.....	6092	2658
Order extending time to file record.....	6093	2659
Clerk's certificate	6094	2659
Original citation	6095	2659
Stipulation as to printing record.....	6096	2660

VOLUME III.

No. 813.

ROBERT P. ALLEN et al.

vs.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY.

4793 WALTER NASH, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. Will you state your name, age, residence and present occupation?

A. Walter Nash, 32 years old, in the real estate department of Mercantile Trust Co.

Q. Residence, Little Rock?

A. Yes, sir.

Q. Have you had any railroad experience?

A. Yes, sir.

Q. I wish you would state what it has been, just give a history of your experience.

A. My first experience was watching the bridge at the Iron Mountain bridge here, letting teams backwards and forwards, and I don't remember just how long I was there; I believe I went from there to firing an engine on the Iron Mountain, and I fired an engine for about nine months, and I went to the Rock Island, and went to braking, and I was promoted to conductor; I broke about three or four months, something like that, possibly longer than that, and then I was promoted to conductor, and given charge of steam shovel and construction work on the Eastern Division.

Q. What road was that?

A. The Rock Island. I was at construction work about 18 months, and then put in the freight service; I think I was
4794 in the freight service three or four years, something like that.

Q. As conductor?

A. Yes, sir. And then I went into the passenger service, and I was in the passenger service about two or three years, I don't remember just what, as conductor.

Q. Is that all of your railroad experience?

A. Yes, sir.

Q. With what roads has that experience been?

A. Been with the Iron Mountain and Rock Island; it was the Choctaw & Oklahoma & Gulf then.

Q. Now the Rock Island.

A. Yes, sir.

Q. Your experience was all in the State of Arkansas?

A. Yes.

Q. How many years of that experience was with the Iron Mountain and how many with the Choctaw, if you can recall approximately?

A. I guess there was about in the neighborhood of six years with the Rock Island, and altogether, the time that I worked for the Iron Mountain, I was off and went back to work for them again—I guess it was about four years; I am not certain about that; that has been a long time ago, and I don't keep track of those things very well.

Q. I just wanted to get an approximation of your years of experience with each road; when did you leave the railroad experience?

A. I think it has been about five or six years ago.

Q. Prior to 1907, was it?

4795 A. Yes, sir; if you want those dates, I think my old train books and other things, I could dig it up.

Q. I don't care about that; I just want to show your experience; you left prior to 1907, did you?

A. Yes, sir.

Q. We have got a question in this case of a division of expenses between local and through freight trains; in making the division, the State in its Exhibit allowed 50% extra mileage for the switching done by local trains, or in other words, if the local ran 100 miles 150 miles was counted, taking 50 miles as consumed in switching.

Mr. Gray, one of the witnesses for the railroad, testified in rebuttal that was not sufficient allowance for switching done by local trains. I wish you would state your opinion based upon your experience as to the proper allowance?

A. I would judge somewhere between 25 and 50%, not over 50%.

Q. I wish you would explain why it is that you have reached that conclusion; explain your process of reasoning in reaching that conclusion; of course, I am asking all these questions based on your experience.

A. Yes. Well, you take, as I understand now,—I am a Rock Island man; I never ran a train on the Iron Mountain, but you take over there, an average freight run will run somewhere between 12 and 16, may be 17 hours a day; we were supposed to work 16 hours before we would tie up; in case we were somewhere near a terminal, or near through with our work, we would not mind putting
4796 in extra time; we would not tie up at any point; we would want to get somewhere where we could get food, and have a place to rest before we tied up.

Take a local train, say on a 100 mile run, you could figure the time in there, it would run something like 50%. In this time you would lay out, you are the most inferior train on the road—you

have got to get out of the way of everything and you lay in the siding, waiting for other trains to go by, and you have got to help other trains out when you are called on to do it.

You take on our run, the biggest part of our switching was at Brinkley. In switching, however, you never go very fast switching, and you take the time allowed for switching, a man walks when he is switching; he doesn't ride many cars; he goes into a terminal where he is going to do switching, and gets his switch list from the agent, and he has got to send his brakeman out to spot the cars where they are on the different side-tracks and different industrial tracks, and that takes considerable time, and the engine is standing still all this time, and then he figures out his scheme of switching and goes to work and does his switching.

I would say that the time that an average crew allows for looking over his switch list and spotting the cars for the amount of switching—that takes about as much time as the engine actually works.

Q. What speed does the engine usually travel in switching?

4797 A. I shouldn't think it would average over 5 miles an hour.

Q. You have stated these causes of delay, and the speed of your switching engine in switching; now I ask you how you apply that in making your estimate of from 25 to 50% of extra switching by local trains,—extra mileage in switching by local trains?

A. Let me figure it here a minute.

Q. Explain it out; we are after the reasons more than the actual facts.

A. When it comes to figuring percentages, I have to figure it over a little bit—take a through train—

Q. Through or local?

A. We are comparing the two?

Q. No, just cut out the through.

A. We will take a 100 mile local run, and we will say it will run 20 miles an hour between stations; that would be 5 hours it would be allowed to get over the division, if it made no stops anywhere; now we take that 16 hours you are on the division, somewhere between 12 and 17, we will say 16—that would leave 11 hours that you would be doing something else besides running on the road.

I would have to study to see about the delays there, but there is 11 hours difference right there; out of the 16 hours, there is 5 hours actual running time on the road; 11 hours' time, that is
4798 either delay, laid out by trains or switching, or taking water or coaling the engine or engine failures. There is 11 hours there. To get at the percentage there, between that and actual switching time, I would judge about somewhere in the neighborhood of half of that 11 hours would be switching, and the other half from laying out by trains and engine failures, and helping other trains out on the road, and such things as that.

I would put in half of the 11 hours say—

Q. And to get the mileage, do you use the speed you have testified to,—five miles an hour?

A. Yes, sir. There would be five hours and a half of actual switching time at 5 miles an hour, would be $27\frac{1}{2}$ miles that I would switch on the 100 miles.

Q. Is that illustration you have given, a fair illustration of an ordinary run of a local freight?

A. Yes, sir, I believe that is fair.

Q. I mean an average; of course, I understand from this case there would be exceptional cases.

A. Yes, sir, averaging up for spring and all the time—

Q. That would be your judgment of a fair average?

A. Yes, sir.

Q. Mr. Gray testified in regard to this, on page 703, that in his judgment that no one could tell what would be a proper amount, and that he had no method of arriving at a proper amount of switching for a local freight. I will ask you what you think of that, as to whether that is correct—or whether in your experience in handling local freights, there is, you think, a fair average that can be made?

A. I believe a fair average can be made. I think any man that has run a freight train until it becomes a kind of second nature to him—there is lots of things about running a freight train that a man really couldn't think of them all; his orders and his switching and his little bills here, and his shorts and overs yonder, and everywhere; it is kind of drilled into him until he does lots of things automatically; that is the way it seems to me; I believe a man could get this average very well; a man gets it drilled into him until it is a man of second nature.

Q. In other words, he knows what he does on a local freight train?

A. Yes, sir.

Q. Now, Mr. Ward puts the same proposition, page 609 of this thing—"No operating man that I know of could determine with accuracy as to whether that division was correct or incorrect"—that is referring to this 50%.

I will ask you, who, in your opinion, would be the best man to determine the matter of this kind, the general manager of a railroad or the man who is running the local freight?

A. I believe the man on the ground would be the best one.

Q. With all due deference to the general manager?

4800 A. Yes, sir, with the highest respect in the world to him; we are taught that too all along the line.

Q. You are taught that?

A. It kinda becomes nature to respect our officials.

Q. These general managers, I will say for the benefit of the record, are most excellent gentlemen; you think that no matter how excellent these gentlemen may be, that the local freight man would know a little more about it?

A. I believe the local freight man and the man on the train, is better familiar with all conditions than anyone else. I think the same is true of either freight or passenger men.

Q. In making up the exhibits in this case, and dividing the ex-

pense between local and through trains, the State allowed a stop every five mile for a local train and every twenty for a through, and made certain statistics based upon that.

The railroads have put in an exhibit which is #56, in which they use the same method of arriving at this cost, but take eight times—that is, that the local train stops eight times to where the through stops once, as against four to one used by the State.

I want to call your attention to this matter of the eight times and ask you, if in your opinion that eight times, stopping of local trains, is a fair estimate. I believe you have testified you have had experience on both local and through?

4801 A. Yes, sir. I figured on two runs I once ran on; I am just figuring on a local run from Madison to Little Rock, and the fast freight train from Madison to Little Rock, and I find that the local run would average about 15 stops between there and Little Rock or Argenta, and the other one would run about eight stops.

Q. How does that run out; just complete your calculation?

A. That will run out—the local would be 8/15ths.

Q. Figure it—8 to 1 or 5 to 1 or 4 to 1.

A. If I would stop the local another time, and make it 16 times, it would be 1 to 2.

Q. You would not agreed with this 1 to 8?

A. No, sir.

Q. You say that was on two runs you made?

A. Yes, sir, that I once ran myself.

Q. What is your observation and experience of those two runs, compared with the ordinary run of state and through trains in the State of Arkansas?

A. The locals just about average up; in the winter time, you would make, say four more stops on that run; in the summer time, you would lose four may be, because you understand the business is heavier; that is about the way I figure it up.

Q. You have taken that, averaging it up one season to the other the local?

A. Yes, sir, and for the through train; that is for one through train only.

4802 That is the best train they had at that time; I believe the first number of the train was 9, and then it was changed to 31, and then to 83; that is their fast train.

Q. You contrasted the local with their fastest train?

A. Yes, sir.

Q. There is a lot of other throughs—

A. If you would rather, I will tell you how I get at this?

Q. I want you to make a full explanation.

A. I started in at Madison with 83; the first thing, we doubled the hill; most always in those days, we doubled the Forrest City hill.

Q. That is 83, your through train?

A. Yes, sir; we got to Forrest City, and we set out from 1 to 4 cars there, for Forrest City. We got to Goodwin and take water;

we got to Brinkley and set out from 1 to 4 or 5 cars, along there somewhere; we go to Biscoe and meet #4; it was then going east—taking the siding for the passenger train, and then we would take water at Hazen sometimes; we generally stopped in there somewhere to get by a train; we couldn't meet a train at De Vall's Bluff; we would stop at Biscoe or somewhere in there; then we stopped again, sometimes at Lonoke for orders, but I don't believe I counted Lonoke; I think my next stop on the train would be the crossing out there at the Dixie Mill.

4803 On the local, I started in at Madison, and I stopped at

Forrest City, and I stopped at Palestine, and I stopped at Wheatley, and I stopped at Brinkley, and I stopped at Biscoe, and I stopped at De Vall's Bluff, and I stopped at Hazen, and I stopped at Prairie Center or Cuneo, and I stopped at Carlisle or Lonoke, and I stopped at Galloway or Dixie Mill, making 16 stops.

Q. Go back to the question as to whether these runs you have just given, of local and through, would be fairly representative of average conditions in Arkansas, according to your experience?

A. If all the through trains were as good as #83, this high ball train, that would, but that is the very best through freight train they have; they don't ever have a train going east as good as this.

Q. Conceding for the purpose of this question, that all the trains make the time, and there is no more stops than on their best train—put it on that basis?

A. I think this is fair then; I think that is a fair estimate between the two trains.

Q. Do you think those conditions would apply on the Iron Mountain and Cotton Belt?

A. I shouldn't think it would vary much; I have never run a train over there; I don't want to take the responsibility to say what the other fellow does, but I would judge that would be right.

4804 Q. You fired an engine on the Iron Mountain?

A. Yes, sir.

Q. I have assumed in that question, and you have in your answer, that all the through trains would make the same time that that fast train made, and make no more stops than that fast train; is that a true condition?

A. No, sir, as I said, this is the very best train we had in those days, on the Rock Island; the opposite of that, say this is 83; the other train east was 84; it was supposed to be as good a train as this; it had the same rights on the time card; it didn't have as many loads; this was all loads; no empties on this train at all; on the same train going east, it was supposed to be as fast a train, sometimes we would have three-fourths of the train empties, to peddle out at different places.

Q. A great many stops?

A. Yes, sir.

Q. Are you familiar with Train #55—the Texas Red Ball on the Iron Mountain?

A. Not very.

Q. You know what the train is?

A. I know what it is supposed to be.

Q. What is it supposed to be?

A. Supposed to be their fast train; the same thing that 83 would be on the Rock Island; you understand I don't want to mislead anyway here; where I get my ideas about different trains, is just through association with other railroad men; we met in the 4805 same division point, and about the only sense a railroad man has got, is railroading, and that is what we talked about.

Q. I am asking you generally, your knowledge of this train and from your railroad experience, how it would be handled; I understand you to say it would be handled on the Iron Mountain like #83 would be handled on the Rock Island?

A. Yes, sir.

Q. In other words it is the fastest train that either of those roads run?

A. The fastest freight train.

Q. I expect our Iron Mountain friends would claim #55 was better than #83 and our Rock Island friends might claim #83 was better. I am just using those two as types of the best trains they run, not asking you to compare them.

In the testimony of Mr. B. W. Moore, he was yardmaster of the Iron Mountain, he puts in an exhibit in this case, #55, I believe it is, showing how this Red Ball train moved through the terminals; puts that in as type of their through traffic, and based upon his exhibit he testified in substance, as I recall it, that the through trains get very little handling in terminals.

I wish you would give your opinion, first, as to whether the handling that one of these Red Ball trains would get in a terminal is a fair test of what a through train would get in a terminal; all 4806 through trains, I mean?

A. No, sir.

Q. Explain your reason, we want reasons more than the calculations.

A. Take 83 again; that is supposed to be made up in station order all the way through; for instance, when we get to Forrest City, we find a number of cars to set out there; we find them on the head end next to the engine; we had to make a drop of those cars at Forrest City; when we get to Brinkley, we would find cars for Brinkley next to the engine again; that made it convenient to switching.

When we got to Little Rock, we would know by our train book, in making out our switch list, that all the Little Rock cars were next to the caboose; they were made up that way in the yards at Memphis by the switch engine. I believe I would say about 50% somewhere about there—better make it 40% of the cars, of the remainder of the train, would be set out here, and then there would be 60% to go through; that 40% would be placed next to the caboose; they would be placed together in the train, so that one switch would throw these out. In the balance of the train, there would be cars for Howell, Oklahoma City, Shawnee, and different points up there—Haleyville. They would fill that train out with what

cars we would set out at Brinkley, and Forrest City; that would cut the tonnage down about half; well, they didn't pull as much tonnage on the west end as they did on the east end, they would put in half as many cars as they would set out—just about that; some of those cars would be for Haleyville, some for Howell, some for Shawnee, and some for Oklahoma City, and the switchman would take the switch list, and he would be supposed to be in the train—for instance, he had a Haleyville car in the middle of the train; he could tell that from the switch list I gave him; he would know that on track so and so, he had a car for Haleyville, and that he would have to put them together, and that he had a car for Shawnee on the switch list and two or three other cars over here for Shawnee, and he would get them together.

That train would not be a fair train then, because you take most of our other through trains over there, sometimes they are made up in toto right here in the terminals.

Q. You would not think that these fast Red Ball trains would be a correct type and their performance would not be a fair representation of the terminal handling that cars get?

A. No, sir.

Q. From your observation and general information as a railroad man, would you say that the explanation you have given of that Red Ball on the Rock Island, would be true in more or less degree of this Red Ball on the Iron Mountain or any other railroad operated in Arkansas?

4808 A. I should think it would be somewhere in the neighborhood of correct.

Q. Did you ever have switching service—I don't remember what you stated in your evidence?

A. I learned how to brake switching.—I didn't draw no pay for it; I was what they call a cub in those days.

Q. You know something about switching cars?

A. Yes, sir.

4809 Cross-examination of Mr. NASH.

By Mr. MOORE:

Q. When did you say you quit the railroad service?

A. I think it was between five and six years ago.

Q. That would be in 1904 or '5?

A. Yes, sir.

Q. Do you remember when you first went onto the Choctaw which is now the Rock Island?

A. It was first the Choctaw and Memphis and then the Choctaw, Oklahoma and Gulf, and then the Rock Island.

Q. You began braking on that line?

A. Yes.

Q. When was that?

A. I am unable to give you that. I began working on the old mud line, just after the old Choctaw bought it.

Q. That was 1898?

A. They hadn't connected up their line with the west; I had been on there about eight months when they connected up.

Q. What character of work did you begin with? Braking?

A. Yes, sir.

Q. I believe you said you were engaged in that two or three months?

A. Yes, sir.

Q. Then you were put on the steam shovel?

4810 A. Yes, sir.

Q. How long were you engaged in steam shovel work?

A. About 18 months, I believe, something like that; I dug up about 76 acres of ground about 20 feet deep, and put it out on the track.

Q. That was during the construction of the line west and re-construction of the Memphis line?

A. Yes, sir, I was on the re-construction.

Q. Then what was your next service on that line?

A. The next service was in freight service, running a freight train.

Q. Had the lines gotten connected up when you began running a freight train?

A. Yes, sir, they were connected up long before then.

Q. That must have been about 1899 or 1900.

A. I know I was still down in the mud when the new passenger cars came over, and I had the same awful bad track down there.

Q. How long did you work with freight trains as a conductor?

A. I don't remember; if you had asked me just after I quit rail-roading, I wouldn't have known; I could dig it up for you.

Q. At any rate, it was along in the early days of the Choctaw Oklahoma & Gulf?

A. Yes, sir, I ran a passenger train over there about two years,—must have been in the freight service about three—

4811 Q. And that would bring it somewhere to about—you quit in 1904 or '5?

A. Yes, sir.

Q. And you ran a passenger about three years?

A. Yes, sir.

Q. That would take it back to 1901 or '2, that your freight service continued?

A. Yes, sir.

Q. Had they gotten that Memphis & Little Rock Railroad repaired and completed at the time you quit the freight service?

A. Yes, sir.

Q. Just about that time wasn't it?

A. I was about the last man to finish up down there; when I finished up with my steam shovel, the road was in good shape then, and then I ran a freight train after that.

Q. How long did you run a freight train after the through traffic commenced over the connected lines of the Choctaw?

A. All my time in freight service was way after they connected up.

Q. That at that time, was practically a new road?

A. I believe it was then—six months after I took charge of the steam shovel construction over there, they had the trains running through; then there is another year I still continued in the steam shovel service at different points along there, and then I
4812 went in freight service, and I must have run a freight about three or four years.

Q. That line was opened up then, about the time or a little before you began freight service?

A. Yes, sir, about a year before.

Q. It was then prior to that time or had been just a short line from Memphis to Little Rock?

A. Yes, sir.

Q. And did very little business while it was in the hands of the receiver?

A. I don't know what it did; it was the Choctaw & Memphis when I went over there.

Q. The traffic on that road had not been fully developed while you were on it?

A. Our traffic was pretty heavy when I went over there, because we had a lot of material coming over it—

Q. I mean the revenue traffic?

A. I didn't know anything about that until I got in the freight service.

Q. How many revenue freight trains did you run—local trains—did you run each way, while you were running freight trains?

A. On the time card, we had a local each way a day, and two through freights a day, and that was all that was on the time card, and then most of the other was done by extras.

Q. How many passenger trains—just one each way, wasn't there?

4813 A. No, sir, I know we had two passenger trains each way, and I am satisfied we had three.

Q. Did you have a through train at that time, when you were in the freight service?

A. Yes, sir, through passenger service, we had two passenger trains each day from the west—Booneville and out there, and we ran a Hot Springs each way and then we had a local each way.

Q. That was three trains each way?

A. Yes, sir; I was still in the freight service then.

Q. The traffic on that line at the time you were there, was nothing like as heavy as it would be on the Iron Mountain?

A. I shouldn't think so.

Q. You never ran a train on the Iron Mountain?

A. No, sir.

Q. You stated and I will read your testimony—you stated on your run the biggest part of your switching was at Brinkley?

A. Yes, sir.

Q. There wasn't a great deal of switching done at those little side stations besides Brinkley?

A. Let me see; at Lonoke, we had considerable switching; we

had an oil mill and house track and gin; we had some private tracks that we switched quite a lot on, and De Valls' Bluff, we had lots of switching; we had an car factory and then other industries around there.

4814 Q. Besides those three places, there was very little switching?

A. I will call off the places that most of the switching was at; there was Lonoke and De Vall's Bluff, and Hazen came in there—sometimes we had a right smart of work to do in there; we will leave that out because that wouldn't be classed as heavy switching. Lonoke, De Vall's Bluff, Forrest City, Brinkley and Madison.

Q. How were the house track, side-track, passing track and industrial spurs arranged at those stations, take Lonoke for instance, just to illustrate it or Brinkley either one, I don't care which.

A. The house track and stock track were all the same at Lonoke, laid right by the side of the freight depot; I don't know whether I am getting at what you want or not,—and the oil mill—I don't know whether it was an oil mill or gin we had to work, and that laid up about two or three telegraph poles; and at Hazen, we had all straight tracks to work on there, and at De Vall's Bluff, that was a bad place to switch, most of the spur tracks we said nearly all of them ended in the river.

Q. Was there a house track at De Vall's Bluff?

A. Yes, sir.

Q. How many spur tracks did you have connected with the house track?

A. I believe there were four.

4815 Q. Were there any spur tracks connecting with the passing track there?

A. There was none then; there is now.

Q. A side-track and four spur tracks connecting with it?

A. Yes, sir, four or five.

Q. That complicated the switching proposition somewhat?

A. Made it very bad.

Q. How was it at Brinkley?

A. At Brinkley, the switching was all good—the tracks were nicely arranged.

Q. Have any spur tracks?

A. Yes, sir.

Q. Had a house track there?

A. Yes, sir.

Q. How many spur tracks did you have?

A. I don't believe I can tell; you see there was a White & Black River line that came in there, and the Cotton Belt,—I don't believe there was but about five spur tracks.

Q. How was it at Forrest City?

A. That was mostly all spur tracks there on the hillside.

Q. Was there a house track there?

A. Yes, sir, it was a spur too.

Q. Was there also a passing track?

A. It was not considered a passing track right there; it was a

house track connected at both ends, but the passing track was in the cut.

Q. How many spur tracks did you have connected with 4816 that side-track?

A. That side-track, I don't think there was but one spur.

Q. Side or passing?

A. I believe there were five besides the house track, that was connected at both ends; in the olden times, we hadn't passing tracks, before they had long trains.

Q. How was it at Madison?

A. There was lots of spur tracks there.

Q. You had a side-track in Madison also?

A. No, sir, it was all a big spur with other spurs running off to it.

Q. The spur track and then spurs running into that?

A. Yes, sir.

Q. How many spurs were there that ran into the main spur track there?

A. I think two was all, but there were two spurs—one goes to the box factory, and one to the saw-mill—one on one side of the main line and one on the other; one was a straight spur and the other had other spurs on it.

4817 Q. Do you remember how many there were?

A. I think two was all that came in there. I think that is it.

Q. Where there were a number of spur tracks running out from the House Track or Main Track—main spur, it complicates the switching by having to move them all?

A. Sometimes it does, at Forrest City it didn't—I don't remember whether one spur track lead off from the house track or not, at Lonoke it did not, but at Duvall's Bluff it did, because the main lead ran off from the depot and in working all the industrials below there, you had to move all the house cars—move them to some spur while you did your switching, and then pick them up and spot them back again.

Q. Now you say that part of that mine—the time you were laid out on that local train, you were laid out by other trains and by engine failures and by meeting other trains out on the road?

A. Yes, sir.

Q. Now what do you mean by meeting other trains out on the road?

A. Sometimes we would possibly change engines—someone would come along with a better train than we had and just take our engine and we would have to take the sorry engine.

Q. Speaking about engine failures, what are they?

A. They are usually for steam failures and sometimes a break down.

Q. Just the usual incidents?

4818 A. Yes, sir.

Q. Then by laying out of trains—you mean the meeting of trains?

A. Yes, sir.

Q. A good many more trains ran on the Iron Mountain road than there was on that line at that time?

A. I should think there would be, but I was not especially familiar—

Q. You have a general idea of the traffic of the Iron Mountain?

A. I imagine they ran more trains.

Q. A great many more trains considering the volume of other traffic, wouldn't you think so?

Mr. HILL: What part of the Iron Mountain are you referring to?

Mr. MOORE: I mean the Iron Mountain main line, the Fort Smith lines, and those old lines that have been used a long time?

A. I should think they would be running more trains on the main line, but I would think we do more business than they would on the Fort Smith or Valley Divisions.

Q. How about the Knoble Branch?

A. I am not acquainted with the Knoble Branch or the Helena Branch, I don't think they had but a freight train each way.

Q. How was it on the Bald Knob Branch?

A. I think they had a pretty good business over there, but I don't think they done the business over there we did, that is as a whole. You see we crossed the Helena Branch at Forrest City and the Bald Knob Branch at Bridge Junction.

Q. Your estimate of the division of time which you made was just general estimate based upon your recollection I suppose?

A. Yes, sir.

Q. You would not undertake to be definite about it would you?

A. It is just according to which way you would mean definite, I thought over it after I got out of here the other day, got to figuring and trying to figure out the trains and the other things, and I was pretty well satisfied.

Q. I refer to the 11 hours that you divided between switching and meeting other trains on the road and engine failures?

A. Yes, sir.

Q. I suppose that is like these other matters—your memory is not very good about them?

A. There is little details that you cannot remember so well, but there are certain general things that you can remember tolerably well.

Q. The conditions and character of the labor to be done in switching is continually varying from day to day, depending on the traffic isn't it?

A. State that again.

Q. The switching you have to do at different stations varies?

4820 A. Yes, sir.

Q. And it wouldn't be the same on different lines of road?

A. No, sir, I should think every station would be different.

Q. Whose orders does the conductor of a freight train act under in switching?

A. He acts under the agent's orders at the station.

Q. The agent transmits the orders to him?

A. Yes, sir, he gives him the switch list.

Q. Who do they come from?

A. Usually from the despatcher.

Q. Who does the despatcher work under?

A. You are getting in too deep water for me.

Q. The superintendent of the division is the general head of that sort of operation?

A. Yes, sir.

Q. And it really originates and emanates from him—the orders in regard to switching?

A. Yes, sir—wait just a minute about those orders emanating from him, you understand he is over everything on that division, but there is certain shipments laid out he wouldn't know where you were, where you were switching or on what track you were, the despatcher looks after that, he keeps after cars so that he knows these things, the conductor renders him a report from blind sidings.

Q. In describing some of the services that you rendered in switching, you spoke of setting the cars out—four or five cars at certain places, you also picked up cars didn't you?

A. Not on that run, rarely ever, the only cars we picked up that run, the only thing I ever remember picking up, and I don't believe I picked up that, was picking up a car of stock that went west—I know that has been done.

Q. Wouldn't there be cars to take out?

A. No, sir, I was speaking about our No. 9, 31 or 83.

Q. What was the particular run you were testifying about?

A. This is one train, our No. 9, 31 or 83, those were our High Ball trains, and we set these cars out but we didn't pick any up.

Q. Who picked them up?

A. That was their destination.

Q. These cars would be picked up and taken away from there some time?

A. Yes, sir, the empties would be picked up and taken away.

Q. Who picked these empties up?

A. Sometimes they would be picked up by the local and sometimes set on the siding and loaded.

Q. The locals had to get them out of there?

A. Sometimes—last night I was down to the depot and there came an engine and caboose by there going out, and they will pick up loads all the way from here,—that is a through train, that is an extra, it is not a local.

4822 Q. The other trains picks them up at Terminal Stations but doesn't at local stations?

A. Yes, sir.

Q. Then it isn't a through train if it is doing that kind of service?

A. It is not on the time card as a local.

Q. Isn't it one of the distinctions, and so far as its operation is concerned, a very important distinction between locals and through trains, that the through trains do not do that kind of work—pick-up work and the cars are taken away from it at the terminal station, and the local does the work at stations?

A. That is generally the way.

Q. It wasn't worked that way when you were running?

A. It was generally worked that way.

Q. You would leave a car to be unloaded and then it would have to be hauled out of there empty, or if there was another load put in there, they would have to be hauled out on your local?

A. Generally so they did, for instance, Brinkley is a pretty good point, and we have a branch off the White and Black River—

Q. You would call that a kind of a terminal? Terminal station?

A. If you want to consider it that way.

Q. That is not the kind of work that through trains do at way stations?

A. Not considered so.

4823 Q. Was the practice different on that road from what it generally is in that respect as between picking up by through trains at way stations?

A. I don't know about that, most every official has his own way.

Q. You couldn't tell by your experience on that road what the practice would be on another?

A. No, sir, not positively.

Q. Do you know about how it would compare with the Iron Mountain?

A. No, sir.

Redirect examination.

By Mr. HILL:

Q. In referring to orders about switching, would the train dispatcher give the orders for switching at a station or would the station agent?

A. The orders that we usually had was just a switch list.

Q. That was given to you by the agent?

A. That would be handed to us by the agent.

Q. Do you know whether the train dispatcher would direct the agent to make up this switch list?

A. I know if we refused to do the agent's switching then he would get orders from the Train Master for us to do it.

Q. You would get orders as to the switching from the station agent?

4824 A. I believe our book of rules had something of that kind in it, it has been a good long time since I looked at it, I think there was a rule in the book of rules that we would apply to the agent for the switch list.

Q. That was the practice?

A. Yes, sir.

Q. He would tell you where to put in the cars and where to take them out?

A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. And he would get his orders from the Train Master I suppose—or the train despatcher?

A. I should think that is where he would get his orders, the despatcher kept track of the cars.

Witness excused.

4825 D. L. McNEW, being first duly sworn and examined testified as follows:

Direct examination.

By Mr. HILL:

Q. Mr. McNew, please state your name, age, residence and present occupation?

A. D. L. McNew, age 48, I live in Little Rock, and am in the Real Estate business.

Q. Have you ever had any experience in the Railroad service Mr. McNew?

A. Yes, sir.

Q. Wish you would give a little history of your railroad experience, beginning first—at the first of it, give the various capacities in which you have served, how long, and with what roads?

A. I began—I don't remember dates very well, I may make some mistakes of several months.

Q. I am not caring about that, I want you to give us approximately the history of your service.

A. I began in 1882 as messenger boy for the Monan at Mitchell, Ind. I worked at that station about a year in different capacities for about a year for two different railroads,—the Monan and the Ohio & Mississippi; I worked for several months in the Road Master's office as clerk; in 1883 and the beginning of '84, I worked for the Vandalia,—clerk at Greenville, Ill. During the summer of 1884 I worked for the Frisco Railroad out of St. Louis, and for the South-

4826 first experience as a brakeman when I first started—I worked a while for each one of them. I came here in the fall of 1884 and went to work for the Little Rock & Fort Smith as brakeman. From that time until about March 1889, I worked on the Little Rock & Fort Smith and Iron Mountain railroads most of the time as brakeman. From March 1889, for three years and seven months, I was night Yard Master for the Old Memphis—

Q. That is the present Rock Island?

A. Yes, sir. I had charge of the switching at nights, and part of the time in the day time—probably a month of so at a time. I was then out of Railroad service probably about six months, when I went to work for the Iron Mountain as conductor.

Q. As Freight conductor?

A. Yes, sir, freight conductor on the Valley Division, I think I

worked for them two years down there; and from there I went to the Cotton Belt at Pine Bluff, worked four years as freight brakeman and conductor,—most of the work I did was between Pine Bluff and Texarkana and Shreveport.

I was then out of the service of the Company probably six months, and then I went to work for the Illinois Central at Central City, Ky., as Yard Master, and I held that position about ten months, then I transfered to the Evansville District as freight conductor, and I worked there about four or five months.

4827 While working there I was appointed Night Yard Master for the Old Choctaw Company here at Little Rock, came here on the 10th of January, 1900, and I was in the service of the Company until March 1906 as Yard Master and conductor.

Q. Freight or passenger conductor?

A. Freight most of the time, passenger conductor part of the time.

Q. Did you ever run on local and through freights?

A. Yes, sir.

Q. You had experience with both of them?

A. Yes, sir.

Q. You quit the service I believe you say in March 1906?

A. Either the latter part of February or the first of March, about that time.

Q. You haven't been in railroad service since?

A. No, sir.

Q. We are trying this case, Mr. McNew, as for 1907, you were then out of the service at least then a year before our questions come up.

Did you have service as brakeman in the days when the link and pin were used and hand brakes?

A. Yes, sir, that is nearly all the braking that was done by me except on the Cotton Belt, we had a few air cars—well we had a good many patent couplers, they come a little earlier than the airs did,—I probably had four years with the link and pin couplers as brakeman.

4828 Q. You had observation and experience in the use of the automatic coupling and air brake in the yards and also on the road?

A. Yes, sir.

Q. Mr. McNew, in make- a division of expenses between local and through trains in this case, the State has filed exhibits in which they have made an allowance for damage to equipment from starting and stopping and from switching—they base their exhibits upon a table prepared by Wellington, an authority upon railroad matters, in which he puts these two cases of injury to equipment at 35 per cent of all the injury to equipment. Now I will not ask you to pass upon that percentage,—I understand in this case it is not disputed that was the correct percentage in the days of the link and pin and hand brakes, but several witnesses have testified, owing to the change of equipment from link and pin to automatic couplers, and from hand brakes to air brakes, that this percentage should be changed—that

it should be greater, assuming that 35 per cent was the per cent in the old days—that it should be greater, I wish you would give us the result of your opinion, based upon your experience as to that?

A. Of course I know nothing about the percentage—

Q. I say, assume that was the correct percentage, I want you to give the comparison of the damage to equipment in the days of the old equipment as compared with the damage to the equipment—the cars, under modern equipment—that is the point I want your
4829 opinion on. Assume that the percentage is correct, or any other percent—or just an average comparison of the injury to the cars under that system as compared with the injury to the cars at the present.

A. Well there is no question about where the equipment would be part of the old and part of the new mixed, there probably would be more damage, on account of the strength of the engines—the strength of part new equipment, there might be more damage than there would be under the old, but take all new equipment, I don't think the percentage would be raised any—The cars are not handled as carefully by the men as they used to be, because they don't deem it necessary, for they are so much stronger and can stand more rough usage, but my observation is, the percent of damage would really not be as great,—I don't think it would—as it would under the old equipment.

Q. Take starting and stopping, separate those two things—these have been considered together, starting and stopping on the road and in switching,—let us consider them separately. Take starting and stopping on the road about what damage would there be under the present equipment as compared with the damage under the
hand brakes and link and pin?

4830 A. I don't think the present would be as great, from the fact the old equipment had a great deal more slack, and in starting trains forward on heavy trains especially, the old engines would start and invariably back the train up and then start, and that would take the slack out, and in going over the roads, going over the rough places, they would be pulling out drawheads, and I don't think they would have so much of that probably under the new equipment—they can't get any slack much with the new equipment, and I don't think the percent of damage would be near as great under the new equipment as it was on the old on that account.

Q. Now Mr. McNew, we have another problem here for switchmen and trainmen. The State in its exhibits has allowed fifty per cent for switching done by local freight on the road. That is considered on mileage basis—in other words, if there is a run of 100 miles, they have counted it 150 miles, allowing 50 miles for switching done by that train. Several of the witnesses for the railroads have testified that this is not sufficient allowance, and that it is not feasible or practicable to ascertain how much switching is done by a local on the road. Now I would like for you to give your experience on that as to whether you can make an approximately accurate esti-

mate of that, based upon experience and upon the general average conditions?

4831 A. Well, I would like to say that every run I ever run on would be different from every other one, I don't think I ever was on a local run that there would be fifty per cent additional mileage made in switching.

Q. How do you get at that, you have an idea it wouldn't be that much, I want your reasons, I want to know how you get at that proposition?

A. Well that is pretty hard for me to do, except just from my experience and knowing the distance we have to travel and set out our cars and doing the switching at different stations—like this, you might ask me how many men in this house, I know there is not fifty, but I don't know how many there is without counting them.

Q. Can you illustrate that by taking some run with which you are familiar, and consider the number of stops that are made and the amount of switching that is done and the speed that you make in switching?

A. Well, I might figure like Mr. Nash did, I never have done that, of course that would put a limit to the number of miles and the time consumed.

Q. You heard Mr. Nash's testimony and his estimates based upon his experience?

A. Yes, sir.

Q. How do they compare with your experience?

A. I believe Mr. Nash's speed is too high, I don't believe he can average five miles an hour—it wouldn't average five miles an hour.

Q. I believe he took five miles an hour speed actually
4832 made while engaged in switching?

A. Yes, sir.

Q. I don't know whether he stated the maximum or not.

A. You might take a state where you have no freight to unload and nothing to do but switching, and nine times out of ten you would switch an hour, and you wouldn't travel five miles in doing that much work, taking every thing into consideration, looking up the cars, coupling them up, and there is always more or less delays you can't explain, you couldn't explain it to the train master.

Q. The engine wouldn't run up and down the track all the time?

A. No, sir.

Q. Here is the point I want your opinion upon. Can you take various local runs on any other railroad, take men familiar with the business and the usual way business is run, can you,—taking all these features into consideration—arrive at any fairly accurate estimate of how much switching is done by a local freight?

A. You mean the amount of miles run by the engine?

Q. Yes, sir.

A. Yes, it would be figured out accurately, I could make a trip and tell you without keeping cases of every little move I would make.

Q. You think it is something that can be worked out accurately?

A. Yes, sir.

4833 Q. Did you hear the quotations I read from Mr. Gray's testimony and Mr. Ward's testimony?

A. No.

Q. I believe I have stated in my previous examination, that they didn't think that was a matter that could be worked out. These two excellent gentlemen who testified that fact were General Managers, if you were going to work out that problem, who would you go to—the General Manager, or, what men would you go to to get that information?

A. Taking that from a General Manager's standpoint, his answer is correct, but taking that from being on the ground and from experience, his answer is not correct.

Q. Who would know most about it the General Manager, or the brakemen or men running the train?

A. I don't think—I don't see how any body could know that except the people right on the ground.

Q. Mr. McNew, in an exhibit filed by the Railroads, No. 56, they have made certain calculations on the expense of the local and through freights and have counted the *the* local train stops eight times to one stop of the through freight—I am speaking of freight trains, I will ask you what is your opinion upon that?

A. Well, that is like the other question, it is different on different divisions, you take the division I run on, I run on the local between Hopefield and here, Hopefield is near Memphis.

4834 Q. On the Iron Mountain?

A. No on the Rock Island.—I don't know that I ever made every stop, it is a hard day that you make every stop, there are about forty stops on there for a local, and on the through freight—it makes, I would judge about eight—that would be about five to one, if the local would make every stop, they ever make and the through freight would make their ordinary stops that they always make, the local would stop about five times to the through freight's one.

Q. Now is that anything like the usual conditions that the local would make every stop?

A. No.

4835 Q. Out of the possible 40 stops, how many, under general average conditions, would you make?

A. Probably 30.

Q. How many did you say for the through?

A. 8 stops, I think; that is for water, crossings, and not taking into consideration any stops for passenger trains?

Q. That would be the maximum stops of the through?

A. Yes, sir, I think they would make eight, if there were no other trains on the road besides that.

Q. Speaking of the through, are you speaking of the fastest through or the general average of through trains?

A. I was speaking of what we call our Red Ball freight train.

Q. That makes the best time and fewer stops than any others?

A. Yes, sir, it is in a class to itself.

Q. You say the average local would stop 30 times out of a possible

40; take the average through, not considering the Red Ball, but all other; how many times would they stop on an average—I am trying to get a natural average condition.

A. They would probably stop half as many times as the local or there would be trips when they would not stop any more.

Q. What I am trying to get at is an average condition, year in and year out, season in and season out; have you had experience on other runs besides that of the Rock Island to Memphis?

A. Yes, sir.

Q. Have you had experience on the Iron Mountain?

A. Yes, sir, but that has been several years ago; I never did much local work on the Iron Mountain; I was nearly always on through freights.

Q. Are these figures you have given, on the run from Hopefield to Little Rock, on the Rock Island, would they fairly represent the general conditions; of course, I understand that one division will differ from another; what I am trying to get at is the general condition, would that be fairly representative of general conditions in the State of Arkansas?

A. Yes, sir. I think there is probably part of this road between here and Memphis, on the Rock Island, where there is as much local work as anywhere.

Q. Taking it large and small, you think that would be fairly representative of general conditions?

A. Yes, sir.

Q. Speaking of that fast train, are you familiar with #55, Red Ball on the Iron Mountain?

A. No, sir.

Q. You know all the roads run one fast train at least.

A. Yes, I understand that nearly all the roads have that fast freight train; it is classed maybe one or two runs higher; it is classed higher than the other through freights.

4837 Q. Assuming for the purpose of the question, you say you haven't personal knowledge of it, that this fast train of the Iron Mountain,—St. Louis to Texas, on its main line, you would know from your general railroad experience how that would be handled, I presume?

A. Yes, sir, they would have the necessary stops to make at all railroad crossings, and water tanks.

Q. I wasn't going into that; I am just assuming that you know general conditions about the fast train on the road; I want to ask you this question:

Would that fast train receive the same terminal handlings, or rather the cars in it, receive the same terminal handlings at division points, that other through trains on the same road would receive; in other words, would the fast train be fairly representative of the amount of handling that would be accorded the through train in division terminals?

A. No, sir, I would think not.

Q. Explain the differences between the fast freight that is run,

between other through trains that run, so far as division handling is concerned?

A. Those fast trains, every preparation is made to save delay to them; where there is any pick-ups, they are always fixed, placed first out, or in a place where they can be picked up with the least delay, even in big yards. Very often a man's position depends on whether he does delay that train or not; while the other trains, ordinary dead freight, it don't seem to have any particular thing to do with the handling of those trains,—not so much at least,—probably it will be composed of lumber or cotton, or something that is picked up by locals or through freights on the road, brought into the terminals, and used to fill out the engine's tonnage with, on either those fast trains or some other through trains.

Q. And they would all be switched in the terminals?

A. Yes, sir, probably stored; some may stay around for several days.

Q. You have had experience as yardmaster and know how those are handled?

A. Yes, sir.

4839 D. L. McNEW, being recalled for cross-examination, testified as follows:

By Mr. MOORE:

Q. Your service as Night Yard Master on the Old Memphis & Little Rock was here at Little Rock?

A. Yes, sir.

Q. This was the terminus of that road wasn't it?

A. Yes, sir, of the Old Memphis & Little Rock,—my service with the Choctaw Company was when they first organized their forces—when they first commenced running through.

Q. This became a terminal station?

A. Yes, sir,—always has been I suppose for through trains. I would like to say in that connection though, that during my service as conductor, I have often been detailed to different yards, and I didn't keep any record of that, because it was just detail work for a conductor—I have been Yard Master at three or four different points on the Iron Mountain at small stations like Pine Bluff, Monroe, Alexandria and Wilmot, and also on the Rock Island at Hot Springs, I went over there two or three different times—especially during the rush business—during the races, I was over there two or three different times when I was running a local train on the White & Black River—I was sent over to Hot Springs and handled the yards during the races, and all that time I was classed as conductor, but simply on detail service.

4840 Q. You were asked whether you had service in the days when the link and pin and hand brakes were used, and you testified, "Yes, sir, that is nearly all the braking that was done by me except on the Cotton Belt, we had a few air cars." Now when

was that, what was the date of your service in which you state was the time when they had a few air cars?

A. I believe I went to work for the Cotton Belt in 1894—we had a great many—we had mixed couplings, I expect a majority of them were automatic at that time, but not many air cars.

Q. Most of your experience was with the hand brakes?

A. As a brakeman, yes, sir, but I was a pretty good brakeman when I was a conductor most of the time.

Q. Are you familiar with the automatic equipment?

A. You mean the coupler?

Q. Yes, sir.

A. Yes, I think so.

Q. What amount of space is there between the head of the draw-bar and the dead-wood in that coupler?

A. Well, I don't know what the standard is,—of course the coupler—the springs may become weaker—

Q. I just mean—I don't mean in exceptional matters—there is a spring in both that gives play in back of the draw bar?

A. Yes, sir.

Q. Now there is about the same play in connection with
4841 that spring in the two kinds of bars—that is what I want to call your attention to?

A. Well no, there is more play in the old bars.

Q. How much more do you think there would be—now we will consider they were all in good first class order?

A. There would probably be—I will say this, we will take two cars, put automatic coupler between them, all in first class order, and we will put the old couplers between them with the ordinary link and pin, and there will be a difference of from one to two feet—anyhow one foot—I will approximate it as one foot, the difference in the amount of slack in the old couplers, there would be that much more.

Q. Mr. McNew, what is the space when it is at tension between the ends of the two—old style draw bars?

A. I couldn't answer that.

Q. It is no more than $2\frac{1}{2}$ inches between the ends of the draw bars—I am talking about between the drawheads.

A. The Draw heads?

Q. Yes, outside the pin,—you know the link is held in by the pin in the opening in the draw-bar, and the draw-bar still projects beyond that. Now I want to know how much space is there between the draw heads?

A. Oh, at times, there would be—owing to the length and of course the size of the pin hole, and all these things, and in the time we had these old draw heads, there was hardly ever any two of them alike—every road had its different patterns, one road
4842 would have five or six different patterns maybe, and there would be probably a space between the draw-heads of about two or three inches.

Q. Then the additional play was given by the back springs of the draw bars?

A. Yes, sir.

4843 MORD ROBERTS, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. Mord Roberts, 57 years of age, residence in Argenta, Pulaski County, Arkansas. I am in the sand business; I have a dredge in the Arkansas River, producing sand for commercial purposes.

Q. You have had long and varied railroad experience, I understand; I wish you would give, as briefly as you can, to develop the experience you have had, a little biography of your railroad experience, commencing at your first work, and with what railroads, and approximately the length of time you worked for the different railroads, and the capacity in which you worked?

A. I am a machinist by trade, learned my trade in the City of Philadelphia, in the Baltimore Locomotive Works, transferred to the Pennsylvania Railroad Co. 1873, as machinist, and after a year and a half's service as machinist, went on the road, firing a locomotive ten months; promoted to the position of locomotive engineer, 4844 ran a locomotive there until July 12, 1876. Dismissed for collision Centennial Yards in West Philadelphia; reached St. Louis July 16th, 1876, and took service with the St. Louis, Iron Mountain & Southern Ry. as machinist, July 17, 1876. Continuously in the employ of the St. Louis Iron Mountain & Southern Railway from that date until May, 1899, as machinist, locomotive fireman, locomotive engineer, travelling engineer, general foreman of shops, De Soto, Missouri. Master Mechanic at Little Rock; for last six months service, general master mechanic, Iron Mountain Railroad, with offices at De Soto, Missouri; two years as General Master Mechanic, Louisville & Nashville Railroad, headquarters Louisville, Kentucky; three years Superintendent of Machinery, Kansas City Southern Ry., part of the time with headquarters at Kansas City and the remainder of the time headquarters, Pittsburg, Kansas; leaving the railroad service entirely, August, 1904.

Q. That was your last railroad service?

A. Yes, sir.

Q. The state has made an effort in this case to divide the expense between State and interstate traffic, and in doing so, in dividing the expenses of freight traffic, they have started with the expense of the local and the through trains, in order to arrive at a proper division between state and interstate.

It is in evidence here that the local train stops oftener than the through train. There is a conflict in the testimony on that 4845 point, but it is undisputed that it stops oftener.

The State's accountants have made up exhibits in which they have put that at four times to one. It is, I believe, an established fact, that stopping and starting of freight trains is a contributing cause and probably a large one to the injuries of freight

cars, and it is also in evidence that switching is a contributing cause and probably a large one to the injury of freight cars.

In order to take care of that item of expense that was heavier on the local train than the through, the State adopted percentages laid down by Wellington in his work on Railway Location of Expense, in which he gives a table of the distribution of the cost of freight car repairs to its various contributing causes.

He attributes to starting and stopping $21\frac{1}{2}\%$ and to switching $13\frac{1}{2}\%$, making a total of 35% on these two items; these percentages were used by the State.

The railroad, in rebuttal testimony, introduced considerable testimony to the effect that while Wellington was a standard authority and recognized as such, that this table to which I have referred was prepared many years ago; it was based on experiments and tests made on the Pennsylvania Railroad, and was probably made in

the early stages; at any rate, it was made while hand brakes 4846 and link and pin couplers and equipment were used.

Railroad witnesses have testified that owing to the difference in change of equipment from hand brakes to air brakes, from link and pin to automatic coupler, and various other improvements in mechanical devices and safety devices, that this table is now unreliable, and that instead of being the percentages given therein, that the percentages for these causes, stopping and starting and switching, should be much greater than they were under the old order of equipment.

I wish you would express your opinion, based upon your experience, as to the effect of the latter day equipment, to which I have referred, as contrasted with the link and pin equipment and the hand brakes, insofar as it affects injuries to freight cars?

A. Does that refer to the item of stopping and starting?

Q. I have included in my question both of them; probably you had better answer them separately, stopping and starting is one item, which Wellington gives at $21\frac{1}{2}\%$, and switching, which he gives at $13\frac{1}{2}\%$; they are grouped together in this exhibit as 35; I expect it would be better to treat them separately.

A. It was my experience, while connected with the railroad, that the application of the vertical plane coupler, with the improved draft gear, and also the completion and application of power brakes, to the train, had eliminated largely the damage accruing 4847 from stopping and starting in the train, local or through, and I believe I am familiar with Mr. Wellington's table, and as you stated, we all looked upon that as authority in its day, but that would not apply now to the changed conditions.

Draft gear and car underframing, has been designed and reinforced with a view to eliminating that damage; I remember very distinctly, when at almost any freight yard or at any intermediate terminal along the Iron Mountain Railroad, during the days of the link and pin coupler, that at nighttime, you would need a lamp to get through it and keep from falling over drawbars, and draft timbers, pulled out in the ordinary handling of trains.

The item of caboose chains or car chains in cabooses—we used

to have to re-enforce springs in our cabooses and to carry chains to chain up cars that would be damaged on the road by pulling out of draw bars; that was largely due to the braking of trains, all from the hind end of the train. They used to have a very severe brake in the caboose, and they would set that up, with the immense amount of slack that there was in the link and pin coupler, and if the train was of any length, it would very often pull out a draw-bar, and the contributory damages, as a result of that—of the drawbar dropping down on the ties—perhaps would not come out of
4848 the socket entirely—I have known of many very severe and expensive freight wrecks, as a result of that, which is almost, or was when I left the service, an unheard of thing, and we have knowledge of those things and I believe it is fair to presume that Mr. Wellington's figures today would be 50% too high for the item of expense due to stopping and starting of trains.

Q. Assuming that his table was correct, as near as such tables could be in the day it was written, of 21½ per cent to that cause, you would now ascribe what percent?

A. Not to exceed 12½, and I think 10 would be nearer the figure.

Q. What do you say on the other proposition—assuming that 13½% would be correct for switching, under the old order of things, what would be the difference now?

A. It is very evident that cars are handled very rough, as a result of switchmen not being compelled to go between the cars to couple them, which applies also to cars broken on the road, but as I stated in the other case, owing to the design of the draft timbers and rigging generally, which was all taken into consideration when the changes were made, the yard damage is not near so great as it used to be; that is due to the fact that the cars are built very much stronger—to take the cars that we used to operate, fifteen years ago, and handle them the way they handle them now, why you wouldn't
4849 need anybody only the switchmen, to break them up; they wouldn't stand it at all, but the expense to build those cars, to fit them for the purpose of resisting the rough usage, has been very much greater, but with a view, of course, to reducing the cost of maintenance.

Q. That additional expense would be reflected in the capital account, not in the repair account?

A. No, sir, that would not be taken into the repair account, and my judgment is that Mr. Wellington's figures are 25 to 40% too high, as applicable in these days.

Q. To be precise about it, our inquiry is as to the year 1907, as to the condition of affairs then?

A. 1907, the conditions had no doubt improved some in the way of more modern equipment, a larger percentage being in use than it was when I left the service.

Q. And I have used throughout in my questions, the present tense; I am really in error in doing that, because the exhibits in this case are made up on the repair accounts of 1907; I want to call your attention to that and ask you if your answers would be correct, applying your answers to the repair accounts of 1907?

A. My statements, I will state, are based on my experience, in the last years of my service.

Q. I presumed that, but I wanted to be accurate in the testimony; I should have stated that earlier.

Now, has your work been such as would particularly call
4850 your attention to these matters, of which you have just testified?

A. Yes, sir, I had charge and was responsible to the management for that work being properly done, and economically done.

Q. Necessarily you learned the contributing causes and their effect?

A. Yes, sir.

Q. You would not have held your job if you hadn't?

A. They discharged me then—the Iron Mountain did.

Q. There has been introduced in evidence, a table made up of contributing causes of damages, prepared by Mr. Berry, at one time chief engineer of the Union Pacific; now, I believe, chief engineer of the Rock Island. It was an address delivered before the Maintenance of Way Association, in which he based upon several years' investigation of the affairs of the Union Pacific, following the Wellington table, brought it down to that date, which was 1904, about the time you quit the service; I believe he reduced the stopping and starting somewhat and increased the switching a small percentage, making a total on these items of about 1% above what Wellington did; the point I want to direct your attention to, is this: If Berry's table were correct in 1904, which as I understand was somewhat of a transition period from the old equipment to the new, what would be the effect in 1907 of his percentages?

4851 Objected to by Mr. Moore because Mr. Roberts' service and opportunities of observation had ceased before 1907?

Mr. HILL:

Q. Since you left the railroad service, have you given attention to your old work?

A. No, sir, I have tried to forget it.

Q. You have not kept up with the changes?

A. No, sir.

Q. You do know, as I have presumed, that 1904 was rather a transition period in changing of equipment?

A. Yes, sir.

Q. I want to ask you this further question, in regard to Mr. Berry's table: How would stopping and starting and switching on the Union Pacific compare with those elements on the Iron Mountain?

A. I am not sufficiently familiar with the contour of the road or the nature of the business on the Union Pacific road to answer that question.

Q. You have been out on it?

A. I have been over it.

Q. Mr. Gray, one of the witnesses for the railroad testified in rebuttal, stated in substance this, as I recall his testimony, that if

it be conceded that the local stops four times, and the through train once, yet the element of damage for starting and stopping, multiplied by four, would not represent the real injury by that cause, because he stated there was a material difference in the damage to starting and stopping of local and through trains; to be accurate about that, I expect I had better read you Mr. Gray's testimony on that; page 712:

After this proposition was explained to him, he was asked to state if he thinks a sufficient allowance has been made there for starting and stopping of cars in local service, and this is his answer:

"There is as wide a variance as it is possible to conceive, between two similar things, between the stop of a local train and the stop of a through train in everyday practice.

"The stop of a through train is most frequently for transportation or operating reasons; that is, it is to stop to take a siding for or to meet and holding the main line for the opposing train. It is usually unaccompanied by any more work than taking of the side-track or holding the main line while the other train takes the side-track. The local freight train performs the greatest amount of functions in connection with a stop of that kind; it may be hours' duration or it may be short; it is all dependent upon the work required at that local station, as differentiated from a through train which has no work whatever to do.

4853- "I would say that an allowance of four times which is predicated solely upon the fact that the stops are four times as frequent, is wholly unfair. I am not prepared to say what it should be, but it should be several times that."

Q. I will ask you your opinion of those statements, based on your experience?

A. It occurs to me, if I might suggest there, that Mr. Gray has got two items mixed; it is the switching that he has reference to, that adds to the expense that the local would have.

Q. I am inclined to think you are right, but I don't know; I am just giving you in his own language, his entire statement on the subject.

A. The damage in stopping the train with the air brake, is to each individual vehicle in the train, which includes the wear on the wheels, brake shoes, and the brasses, and the local trains, as a rule, are light tonnage trains, and not near as many vehicles in the local trains as there is in the through train, and the damage to stopping a local train could not possibly be any greater than it would to a through train, and with the damage based upon each individual vehicle, if the local train had more cars than through trains, the damage would be greater, and if it had less cars, the damage would be less.

Q. For your information, I will state, that the statistics show that the average local train is 16 cars, and the average through train is 32, and on one road, 33. We are referring, of course, not to the expense per train, but the expense per car.

A. The expense per car should not be any greater.

Q. From this cause to any one train over the other?

A. The cost of stopping and starting, the greater expense would be to the train that had the greater number of vehicles in it,—the greater tonnage, simply because the strains and stress would be that much more severe on the cars nearest the engine; that is my way of looking at it, and that has been my experience; I don't think, in the damage to starting and stopping, we can consider the damage or cost of station switching.

Q. In the maintenance of way expense, the State has counted the locomotive as $2\frac{1}{2}$ times the engine miles of the car, or to put it in another way, they have counted that a locomotive running 40 miles, there is as much injury to the way as a car running a hundred; that would be the practical effect of the division. In discussing that, Mr. Gray says at page 703:

"It takes into account no distinction between classes of lading, weights of lading, between the car where the tare is a large proportion of the loading on the rail and where it is a light proportion.

It assumes that the cost is equally proportioned for a car 4855 handled five miles as it is for for a car handled three hundred or five hundred miles. The further inclusion of caboose mileage only accentuates this difference.

Above all that, however, is the fact that two and one-half times a car mile is not sufficient for a locomotive mile as it affects maintenance of way expense. The locomotive, with its shorter wheel base, with its greater axle load, with its connected drivers, with its constantly present problem of counter balancing, with its constantly changing load, on the tank, due to the taking on and using up of coal and water, the known tendency of the engine tank to derail, out of proportion to all other carriages, the damage that a locomotive frequently does to the track itself, while it is on the track, and the greater proportion of damage it does if derailed, none of these facts are taken into consideration."

Those are his reasons for objecting to this allowance of forty miles of the locomotive as against one hundred miles of the freight car, including the caboose; I wish you would give us your opinion as to the reasoning of Mr. Gray there?

A. Owing to not ever having any experience in that line, I never took that matter up, never made any investigations in that direction; I don't believe I am competent to express an opinion.

Q. Do you know Mr. Gray's experience?

4856 A. Well, I am somewhat familiar with it; it is a question that even great minds might differ on; my judgment is, a properly constructed and designed locomotive, operated at a proper speed, is the easiest vehicle that goes over it.

Q. Give us your reason for that, that is what I want to get at, not percentages, but your reasons for contrasting these cars—

A. What I would say would be just merely from a mechanical and practical standpoint, not having made any investigation in that direction, never gave it any thought, but I have operated a locomotive and always considered the locomotive the safest vehicle in the train on any track, and I have run a locomotive over the Iron Mountain Railroad, parts of it and you could look back over the

train and actually you would be frightened; them cars looked like sheep going over a fence; the locomotive would be going along pretty fair.

A locomotive is derailed, excepting the tender less than any vehicle in the train, and owing to a locomotive being counter-balanced, the weight equalized so that it can transfer from one wheel to the other, to take care of the irregularity of the track, which is not the case with a freight car,—we take a one hundred thousand capacity freight car, load it with one hundred and ten thousand pounds of lading, weighing about one hundred and forty thousand pounds of itself, only eight pounds contact on the rail, distributed from center to center—perhaps about 25 feet, 4857 and the very fact of being familiar with the construction of different vehicles, my judgment is, a proper designed locomotive, operated at a proper speed, will not damage the track or right-of-way to the extent that a heavy loaded freight car will.

Q. Take it on a system of general averages, which we have to get at or should get at in this investigation, not taking the best locomotive or worst car, but taking the general average conditions of locomotive and car, I wish you would express your opinion, based upon your experience in the line of work you have done, as to the comparative injury to the way?

A. I don't believe that I am competent to do so.

Q. You just prefer expressing your opinion generally as to the situation?

A. Yes, sir.

Q. Now, there is another point testified to by Mr. Gray and several other witnesses here, as to the comparative cost of repairs, per engine mile, of a local and through engine; that is, an engine pulling a local and through train; I wish you would make a comparison between those two, based upon your experience in repairing locomotives; I am still referring to freight.

Mr. MOORE: I object to that on the ground that it is not proper rebuttal.

4858 A. My experience is that nearly all local freight trains are handled by locomotives that owing to defects or their weight, they are unfit for service in through freight and they are put—even after the flues get leaking, and anything that would cause detention to through freight, the engine is put in local freight service—was in my time, and for the reason that the tonnage was not heavy and the engine could be operated there very satisfactorily.

The expense for keeping the engine in service should be no greater than to keep a through freight engine in service.

Q. These calculations are made on the engine mile basis?

A. Yes, sir, well that engine mile basis, where the engine is not given any credit for the mileage made, and switching at stations, the ordinary care that the engine would receive at the roundhouse, would perhaps increase her cost per mile, actual miles run.

Q. The engine house service comes under another division.

A. This is shop repairs and maintenance that you have reference to.

Q. Yes, sir, and the road service under that head.

A. The engine has practically been 75% worn out in through freight service, as a general rule, and it is put in local freight service to be utilized there before going into the shop, to get all out of the engine that could be gotten out of it.

4859 Now, when the engine goes in the shop, if the expense of the repairs made to that engine is not distributed over the total mileage she has made since in the shop before, but charged direct to the last service she was in, yes, it would look as though she cost an enormous amount, but the actual figures would not show necessarily that the engines cost any more per mile for repairs than an engine in through freight service; I cannot conceive of any reason for it.

Q. Right on the same line, there is testimony here about the expense of maintenance of yard locomotives, as compared with a locomotive on the road; what is your opinion about that?

A. The yard engine, their repairs, owing to the low mileage allowed per car, which used to be with us only six miles per hour,—repairs show very high per mile, or show very high per mile.

Q. Could you estimate how much more they would be than a locomotive on the road?

A. They would be perhaps three times as much as locomotives on the road, on a mileage basis, simply because an engine working 12 hours, would only get 72 miles.

Q. That six miles, I believe, is the usual allowance that is made in the accounts, is it not?

A. Yes, sir; different roads have different methods; some allow six, that I have been on, and some allow as high as eight and a half.

4860 Q. Regardless of the allowance of six miles, taking the actual mileage, what would you say of the comparative injuries to them, or cost of maintenance of them?

A. The cost of maintenance, I would think, would be at least two and a half per cent greater.

Q. On the actual mileage?

A. I don't mean two and a half per cent, I mean two and a half times.

Q. Taking the arbitraries, you would put it at 3 times?

A. Yes, sir.

Q. There would be a difference of course, in the different types of locomotives that are in the yards, as compared with the road; what is the general class of the yard locomotives?

A. It is the general practice, that there is an engine specially designed for that service.

Q. In this case, Mr. Doddridge caused a test to be made on the Cotton Belt Railroad, for the month of October, 1908, of all the expense in the freight traffic—the fuel consumed by the locomotive in the through and in the local service was carefully obtained

from actual figures showing the consumption of each; the result showed that the fuel consumed by the through locomotives was 3½% more than that of the local, on the locomotive mileage basis.

The accountants for the State in this case, used those same percentages on the Iron Mountain. Mr. Gray, in rebuttal testimony, criticises that; he said at page 717:

"It is the application of a six months' operation on the Iron Mountain, with its varying conditions, branches and main lines, with a test on another railroad, without any comparison being given for the benefit of the witnesses, as to the engines used on the Cotton Belt as distinguished from the engines used in the several classes of service on the Iron Mountain, and no information as to the relative number of cars handled on the two railroads, the length of the local, and such as the amount of work done by the two, and my conclusion is that it is not a fair basis upon which to divide the expense of the Iron Mountain road."

Now, it is also in evidence here, from the exhibits in the case, that the trains, local and through, on the Cotton Belt, are practically the same number of cars as on the Iron Mountain, during our test period.

From your general knowledge of this question of fuel consumed on the Iron Mountain and Cotton Belt system, I would ask you what is your opinion as to the fairness of using percentages obtained on one road, and applying them on the other?

A. If the tonnage handled or cars handled, were the same, I consider the conditions and contour of the country very similar; I would be willing to accept the test made on the Cotton Belt as a fair representation of what could be done on the Iron Mountain or vice versa.

Q. In regard to the engine house service, the State has assumed that the local freight locomotive gets no more round house service per trip to the round house, than the through freight engine, and that assumption has been criticised in rebuttal. I wish you would express your opinion on that.

A. Do I understand the question right—the local engine receives greater attention and more repairs at the round house than through freight?

Q. The State assumed that the local freight engine gets no more round house service per trip to the round house, than the through freight engine,—cleaning, knocking fires, etc.,—whatever round house service would embrace, and that position has been criticised; I want to know your views on the subject?

A. Unless conditions have been changed very materially, since I was in the service, the poor local does not receive the same attention as the through does.

Q. In your opinion, there would be no more service rendered to the through traffic?

A. No, sir, on the other hand, the through traffic would be getting the best of it; the cost of caring for the local engine is no more than the through freight, but less.

Q. Turning to the question of passenger equipment, the problem

4863 in this case is to separate the mail and express service from this passenger service, mail and express being carried on passenger trains, the state having no jurisdiction over that matter, and that not being one of the elements of controversy in this case.

It has been deemed necessary to apportion the expenses incurred by the mail and express service and then divide the passenger expense between state and interstate traffic, and in doing so, the car mile basis has been used, which, of course, would put the expense of the mail and express carried, on an equality with the expense of coach and baggage car per mile run; that is, set the coach and baggage car on the one side, and the mail and the express on the other side.

Now, that division has been much criticised as being unfair. I wish you would give us—I would like for you to give it fully—your opinion on the comparative cost of maintaining these various kinds of cars, mail, express and baggage and coach, per mile run, leaving out the Pullman, as that is taken care of;—it is in another account—by the Pullman Company.

A. The cost of maintaining a vehicle in a passenger train varies considerably owing to the size or dimensions of the vehicle; that is, if it was a passenger coach or baggage car or express car; the express cars, baggage cars and mail cars are usually closest to the engine;

4864 the greatest amount of damage and expense to maintaining the draft gear, underframing and trucks, is usually applicable to the cars that are handled closest the engine, for reasons that is obvious, I guess to you; in the first place, those cars have to take all the shock and stress, due to starting of trains, and the damage to roofs and exterior finish, as a result of cinders and gasses from the locomotives; but other than those damages, the coach has a damage that does not enter into the baggage car or express car, and that is the damage to interior finish, lamps, and sash locks, and upholstering damaged sometimes by passengers, and as I said before, they pro rate this cost between the cars; it doesn't take as much labor or varnish to cover a 50 ft. car as it does a 70 foot car, and where the dimensions were practically the same, I would not make much difference between the kind of vehicles in the train, for I believe the damage to the cars nearest to the engine, as a result of the items I have just mentioned, is compensated for by the interior damage done to the passenger coach by the travelling public.

Q. Taking it by large and by small, you think one would about equalize the other

A. I believe they about equalize each other.

Q. There has been a question raised in here, as to the cleaning of coaches; it is a rather negligible quantity, but still it is a quantity and should be considered: I wish you would explain the system of coach cleaning and train cleaning and by whom that delectable service is performed, and how it is managed?

4865 A. To divide the differences in cost of cleaning the different kinds of vehicles?

Q. Not so much a question of division; I want you to explain the system, and what these men do, and how it is generally handled on the Iron Mountain road?

A. In my time, it was generally handled on the Iron Mountain Railroad at our terminals, where we had an organization like our union station here. There is a certain number of men carried as oilers and cleaners, and then some men as laborers that handle the ice, and those men's duties were many; they were to do anything that was necessary to be done in that passenger yard.

Q. Just enumerate, if you can think of them, their various duties?

A. Well, they sometimes take out defective wheels and apply replacement wheels and brasses, wipe the trucks, re-ice the trains, and give them water, clean the lamps, fill them, and sweep out the coaches, dust them, and oh, numerous things.

Q. I presume that there would be no doubt that they spend more time cleaning a passenger coach than they would a mail or express car?

A. Yes, sir.

Q. But could you tell by these various duties that this force would be employed in, how much it would really cost the 4866 company to clean a coach?

A. No, sir.

Q. Were any time slips ever made in which they would say, so much on cleaning, so much on icing, putting on new wheels, oiling and various things?

A. No, sir, that was just bunched and distributed through the number of cars that were handled through the station during the month.

Q. Now, I used to have a friend out on the Greenwood Branch, that had various duties to perform, among others a very perfunctory sweeping out of the coaches, how is a thing like that handled in a place like Greenwood?

A. During my time with the Iron Mountain, we had several points similar to that, and in the summer time, we had an engine watchman there who swept the coaches out, and did whatever was necessary to do to the coaches; we used to run into Van Buren in daylight, and there it was inspected by the regular car inspection force, and brake shoes were applied, if required, and we never kept any car force there excepting in the winter time; in freezing weather, we would give our engine watchman help to keep the fires going in the coaches and keep the coaches warm.

Q. About how much would you pay that friend of mine up there for his multifarious duties?

A. When I left here, we were paying him \$45. a month; he was a good man.

Q. Yes he was; how would you divide that up on the 4867 time—the \$45. a month, the time he spent in cleaning that coach?

A. I am free to confess I don't know; he was carried as engine watchman.

Q. Didn't you have clerks that were carried as car cleaners or to perform various numerous duties, among others, cleaning cars?

A. Yes, sir.

Q. I have used this Greenwood matter as an actual illustration,

but was that unusual in such a station as I have called your attention to there?

A. No, sir, not under the conditions that existed on the Iron Mountain at that time, it was not; we had several branch trains handled the same way; we had our trains at Wynne, Ark., used to be handled the same way, and up here at Bald Knob,—the Memphis trains at that time, some of them didn't run through to Little Rock; they cut out at Bald Knob; the same was true at Knobel, and the division between the car department and locomotive department was made in the office by the chief clerk and I don't recall how it was done.

Q. These car cleaners are like a pooh bah.

A. When you have nothing else, you can charge the expense to that, or employ a man to work in the office, you just hire a fellow and call him a car inspector or car cleaner and put him in the office to help out.

Q. I would like to know what these fellows do that go in 4868 in the trains and sweep over us every time we go in there; they come in and sweep the dust over the passengers—is that part of the car force?

A. That is part of the car department there.

Q. Do they do anything else?

A. I think they find something for them to do around the freight yard there.

Q. I have been anxious to dispense with those fellows if they have no other duties; that is just one of their numerous duties?

A. Yes, sir, to sweep the papers and snuff cans and one thing and another out of the second class coaches.

4869 Mr. ROBERTS, being recalled for cross-examination, testified as follows:

By Mr. MOORE:

Q. I believe you stated that you quit the railroad service in 1904?

A. Yes, sir.

Q. I think you state also that you had give no attention to railroad matters since that time?

A. No, sir.

Q. Your testimony then is based on conditions as they existed in 1904?

A. Yes, sir.

Q. Now, the link and pin coupler, consisted of—just state what the coupler was when in use, when you went into the railroad service?

A. In freight service, they universally used an open mouth coupler, admitting the link, made of about $1\frac{1}{4}$ iron, the mouthing permitting the entrance of the link, about $4\frac{3}{4}$ or 5 inches wide, and we used a pin an inch and a quarter by an inch and a half—was about the section; an inch thick and a- inch and a half the other way.

Q. And that pin dropped in it?

A. Dropped through the coupler; there was a pin hole in the coupler.

4870 Q. A pin hole above and pin hole below?

A. Yes, sir, it was continuous.

Q. What was the length of the link?

A. Usually about from 10½ to 13 inches—different lengths by different roads.

Q. What was the space between the ends of the draw bar and the cars when at tension, straightened out?

A. Between the draw bars when the tension was on them?

Q. Yes?

A. Probably from two and a half to four inches, depending upon the length of the link.

Q. The links then were not of uniform length?

A. No, sir, neither was the distance from pin hole to face of the coupler; that distance was not uniform either.

Q. What do you mean by face of the coupler?

A. Where the two come together.

Q. The two ends of the draw bar came together?

A. Yes, sir, where the ends of the two draw bars went on each car.

Q. From the pin hole to end of the draw bar?

A. Yes, sir.

Q. How much play did the draw bar have? Wasn't there a horn or some shoulder of some sort on the draw bar that would strike against the dead wood?

A. In some cases, but not universally used.

Q. Did they go in universal service?

A. No, sir, they never were.

4871 Q. What is the dead wood?

A. Dead wood or dead block, is a timber across between the draft timbers, just over the draw bar.

Q. What is the purpose of it?

A. The purpose is to be used in connection with the coupler as a dead stop and the horn or off-set—

Q. There was the horn that would go back and strike that dead wood?

A. Yes, sir.

Q. The entire coupling apparatus consisted of two draw bars, one in the end of each car, and when the cars approached, there would be a draw bar in the end of each approaching car?

A. Yes, sir.

Q. Describe that draw bar will you?

A. Which type do you want me to describe?

A. I mean that used in connection with the link and pin?

A. There was as many of those as there is letters in the alphabet.

Q. Take the ones in use then, take the ones in use on the Iron Mountain Railroad, during the time of your service there?

A. The link and pin coupler—

Q. I call it the draw bar.

A. Do you want me to describe it?

Q. Yes.

A. Well, it was made of cast iron, over all approximately 32 inches from the face to the rear end of the shank, looking 4872 at the end of the shank, at a round hole in it about an inch and a half in diameter. and at a later date, the pattern was changed so it had a key through the shank.

Q. Is the shank that end of the draw bar that is under the car?

A. Yes, sir, and connects with the draft rigging.

Q. Go ahead.

A. The hole in the center, a key way was to make it applicable with different types of draft rigging; we had in freight car equipment, about as many different types of draft rigging as there was types of couplers or draw bars; used very extensively on the Iron Mountain was what was known as the American Continuous Rod; those were rods—that is what this key way was in the shank of the coupler for; that key way was made to take a key about $\frac{7}{8}$ ths of an inch by $4\frac{1}{2}$, just put in flat, and on the American continuous rod was a loop that slapped over the key, and that connected the two couplers together, supposed to take the shock of the car.

Q. Let me see if I understand—what is the length of the draw bar, of the solid casting?

A. They run from about 28 to 32 inches.

Q. At the rear end of that, speaking with reference to the front end of the car, and I mean the end that was under the car, was there a spring that it connected with?

4873 A. There was, as I have explained, there is many types of draft rigging that the bar connected to.

Q. Was there usually a spring there?

A. Yes, sir, in all cases.

Q. Was it attached to that spring or was there a plate separated it from the spring?

A. In one type, there was a follower going on the rear end of the draw bar, what we call a follower.

Q. What is that?

A. It was a plate, a given distance from the end of the draw bar, for the spring to go in there.

Q. Then there was a spring?

A. Yes.

Q. That spring was what gave the draw bar play back and forth?

A. No.

Q. Wouldn't the draw bar, when it was driven in under the car, strike the plate between it and the spring and compress the spring, and in that way, make the play?

A. The spring was there to take the shock from the car.

Q. What was the working of the spring; what was the purpose of that spring?

A. The purpose of that spring was to take the shock and stress from the car proper.

Q. In what way did that spring operate in that manner?

A. Simply because the spring was between the draw bar proper and the draft attachment.

Q. The word spring implies there was a give in there, which would play back and forth?

A. Yes, sir, it was a cushion.

Q. The effect of that was to give play back and forth?

A. No, sir, the effect of that was to take the rigid shock—

Q. When the draw bar came back, if the draw bar had been against a stationary object, that was solid and immovable, there would have been no cushion and no play there?

A. No, sir.

Q. When it struck that spring, that spring gave way and the draw bar went back farther in the car than it would if the spring had not been there?

A. It went back farther than if the spring had not been there, unless the draw bar had butted up against part of the framing there.

Q. So, unless the draw bar butted up against deadwood or the frame that it works in connection with, there would be a play there, caused by the compression of that spring, when it would strike the spring, the spring would give?

A. There would be a compression of the spring, yes, sir.

Q. That would give play to the draw bar, and have the effect of absorbing the shock?

A. Yes, sir.

Q. Was there a yoke of some sort attached to the rear end of the draw bar, inside of which that spring worked?

4875 A. Certain types, yes, sir.

Q. Was there a plate at the front and rear end of the spring, what you called a follower a moment ago?

A. Yes, sir.

Q. The spring and the follower or plate, at each end of it, worked inside of the yoke?

A. Yes, sir.

Q. That yoke was bolted on the insides of the draw bar, at the back end of the draw bar?

A. Yes, sir.

Q. And when the draw bar was shoved with sufficient force back under the car, it would go against the plate and the plate would go against the spring, and the spring would give, and in that way, it would break the shock, absorb the shock?

A. Yes, sir.

Q. How was the draw bar,—in what way was the draw bar attached to the car?

A. By draft timbers.

Q. Explain those draft timbers; what were the draft timbers?

A. Well, with the link and pin couplers, all we had—

Q. First, what were they attached to?

A. They were attached to what we called the center sills.

Q. Now, if I understand you, the center sills mean this; there are sills that run longitudinally the length of the car?

4876 A. Yes, sir.

Q. And the center sills are the inner sills?

A. Yes, sir.

Q. How far are they apart?

A. In different construction, they differ, from 12 to probably 18 inches.

Q. And these draft sills to which the draw heads were attached, were strapped onto them?

A. Yes.

Q. Did they rest under them or along side of them?

A. Along side of them; sometimes under them, depending on the construction of the car?

Q. It was usual to place them underneath?

A. Usual to put them between them.

Q. They were bolted to what you call the center sill?

A. Yes, sir.

Q. That is the way in which the draw sill—

A. The draw timber.

Q. Were attached to the car?

A. Yes, sir.

Q. How was the drawhead attached to the draw sill, you had to attach it to the draw sill in order to fasten it to the car?

A. Yes, sir, the draw head was attached to the draft timbers.

Q. In what way?

A. By carriers and bolts.

4877 Q. I wish you would use plain words that people who are not familiar with mechanics will understand; I don't know what you mean by carriers.

A. A carrier would be the plate underneath the draw bar, bolted across between the two draft timbers and separating—

Q. Let me see if I understand that; the draw timber is bolted to the center sill?

A. Yes, sir.

Q. The draw head is bolted to that?

A. Yes, sir.

Q. Now, those draft sills are on the sides of the draw head, are they not?

A. Yes, sir, they are on the sides.

Q. So the draw head is bolted through the side of the draft timber, isn't it?

A. Where a yoke coupler is used, where the American Continuous draft rigging is used, it is a different attachment.

Q. What is that?

A. Which one do you want me to explain?

A. I refer to the American.

A. The American Continuous?

A. Yes.

A. The American continuous draft timbers, this key that I had reference to—

Q. Wait a moment; what is that key you spoke of?

A. The key going through the shank of a coupler passes
4878 also through the timbers.

Q. Do you mean a bolt when you say key?

A. No, sir, I just mean a flat piece of iron, about $\frac{7}{8}$ ths of an inch thick, and $4\frac{1}{2}$ inches wide, by about 24 inches long; that passed laterally through the draw bar, and passing through these draft sills—

Q. Do you mean it passes at the side of the draw bar?

A. Right through the center, centrally through the bar, taking the bar longitudinally.

Q. Do you mean now that the key was inserted in the bar, or was it an attachment at the side of the bar—I don't understand what you mean?

A. It was an attachment that went through the bar.

Q. Was there an opening through the center part that that attachment worked in?

A. Yes, sir.

Q. How was that key fastened to the draw bar?

A. It wasn't fastened to the draw bar.

Q. How would it retain its connection with it, if it wasn't fastened?

A. Simply because the key passes through the draft timbers and carried with it the bar at its proper height, and these keys were tied together at each end of the car, by continuous rods.

Q. What did those rods pass through?

A. They didn't pass through anything; they just tied the two couplers together.

4879 Q. I understand you then, that the one you are describing now, the American, the draw head at each end of the car, at each end of the same car, are connected by this rod you spoke of?

A. By the two rods.

Q. Are those rods connected with the solid casting of the draw bar, or with the yoke in which the spring works, in other words, I want to know if it is yoked in any way with the spring of which you spoke awhile ago?

A. No, sir, those rods are just connected to the key that passes through the shank of the draw bar.

Q. Those rods connect the two drawheads of a car and run longitudinally from one end of the car to the other.

A. Yes, sir, that is from one draw bar to the other.

Q. How are they fastened to the car, those rods you speak of?

A. They are not fastened to the car.

Q. They are under the car?

A. Yes, sir, they are carried by being attached to these keys, pass through what we call needle beams.

Q. Will you explain how this spring or cushion works in connection with those rods you speak of, in that type—how this cushion or spring works in the type of drawhead you have been describing?

A. I just don't catch the question.

4880 Q. You stated awhile ago, that connected with the draw head, and back of them, as I understand, was a cushion, that would absorb the shock?

A. Yes, sir.

Q. Now, in what way, did they operate in connection with the type of drawhead you have been describing?

A. The yoke running at the rear end of the draw bar, the end that is under the car, had two springs, coil springs with a follower in the center—that is, between the two—that follower——

Q. You mean by that, a plate?

A. Yes, sir. That check went down between two cheek plates that was bolted to the draft rigging, and there was a recess in those cheek plates that the follower slipped down in, and when the spring transmitted the shock to these cheek plates and the cheek plates to the draft timbers, and from the draft timbers to the center of the car——

Q. What was the purpose of those rods connecting the two draw heads?

A. I never believed that they served the purpose that the inventor of them believed that they would. It was his intention and it was expected by a great many mechanical men in the early days, that the type of draft rigging—that there would be a continuous tension from the forward end of the train to the rear end, without any strain on the structure; that is, the structure of the car, like as though it was one chain from one end to the other, but 4881 it didn't work out that way.

Q. Those rods, as I understand you, connected the draw-heads at each end of the car?

A. Yes, sir.

Q. What effect did they have in the stability of the drawhead, preventing it from pulling out?

A. If you broke a key in one end, your other end was just as bad off.

Q. But before you could pull a draw head out of that type, the rods and key would have to break?

A. Or a rod break.

Q. Or the rod you speak of?

A. Yes, sir, and it would leave the entire pull on the small bolts that bolted the cheek plate to the draft timber.

Q. In other words, as long as the rods remained intact, in order to pull the drawhead out, at one end, you would have to disturb it at the other end of the car?

A. Yes, sir.

Q. There is another type of drawhead, wasn't there, which was attached to a draw sill that was at the side, and that was bolted there,—a wooden draw sill at the side of it?

A. Yes, sir.

Q. Is there any name for that?

A. Well, there was several types of those; I don't know just which one you have reference to.

Q. Take the one that was in use on the Iron Mountain 4882 road and describe that?

A. There was several in use at that time.

Q. Describe one that would represent them in a general way?

A. The Butler draft rigging, and the Minor draft rigging, they were all used in connection with the link and pin coupler.

Q. They were attached to a draft sill, which was strapped or bolted underneath the center sill on either side of the draw bar?

A. Yes, sir.

Q. And the draw bar was bolted, fastened by a bolt, attached by a bolt to that draft sill?

A. Running down through the center sills, and the draft sills, where they were bolted underneath the center sills.

Q. Now, there was on the inner side of the draft sill, a casting between that and the drawheads?

A. In some cases.

Q. And the draw head was bolted on that through the wood and the casting?

A. Yes, sir.

Q. Then the drawhead itself would work back against this plate or follower and then the plate would come in contact with this spring you speak of, and at the opposite end there was also a plate or follower?

A. Yes, sir.

Q. And the yoke which includes the spring, was bolted
4883 onto the casting or solid part of the draw bar?

A. Yes, sir, the shank of the draw bar.

Q. All those types, you say were used on the Iron Mountain while you were there?

A. Yes, sir.

Q. When did the automatic coupler or what you call the vertical plane coupler come into use, when did it began to come into use?

A. There was types of them introduced as far back as about—as near as I can recall, about 1888, but they were not perfected, so that they were interchangeable, and could not be applied indiscriminately on all roads until about 1894 or 1895—I am not positive about those dates for the reason that the automatic or vertical plane coupler could not be used on all heights of cars; that is, where the center height of the draw bar was not the same from the rail or practically the same,—like you could with the link and pin.

Q. That would prevent it being used interchangeably.

A. Yes, sir, and they would become uncoupled in movement; I might ask Mr. Rosing to refresh my memory—what year did the Master Mechanics and Master Car Builders Association adopt a maximum and minimum height for center draw bars,—and explaining that, it was necessary to do that before the Interstate Commerce Commission could enforce the application of them with safety.

Q. I see the point you make; not being the same height
4884 they could not be worked together?

A. They would slip by each other.

Mr. HILL: My recollection of that act provided that this Safety Appliance Act provided that these appliances should be put in according to the regulations of this Car Builders Association.

Mr. ROSING: There was always a standard height of draw bar for link and pin coupler, back as far as I can recall,—33½ inches was the old standard for freight cars, for the last 45 years, and then when the Master Car Builders' coupler came into use, which was to interchange with all classes of equipment, of all railroads of the United States and Canada,—that came into effect in 1893, giving a certain length of time to make the change; the standard height was laid at 34½ minimum empty and 31½ maximum loaded; there was a variation then and there is a variation allowed today; I think that was about the time the Safety Appliance Act was passed or the application of automatic couplers was made.

Mr. ROBERTS: I think perhaps it was adopted at the convention at Saratoga.

Mr. MOORE:

Q. What was the object of requiring that uniformity of height?

4885 A. The object of requiring uniformity of height was to obviate the difficulty of cars becoming uncoupled in transit, through the irregularity of the track, one car raising up a little and one going down, they would slip.

Q. After this regulation had been complied with, did it become so you could use the two interchangeably, the vertical and the link and pin?

A. No, sir, they were never interchangeable.

Q. Go ahead now.

A. I have got away off.

Q. I will bring your attention to it then; the question I asked you was when they came into use, and that is what you are attempting to describe?

A. They didn't come into general use—they were not perfected until about 1891 or 2.

Q. You spoke in your statement awhile ago, about their being used interchangeably, what do you mean by that?

A. If I did, it must have been in error; they could not be used interchangeably with link and pin couplers.

Q. I understood the link and pin coupler—what do you mean by that reference—that was your language?

A. I don't know.

Q. I suppose what you meant was that the draw heads were used interchangeably with the old draw heads; that is, you would take one of the automatics, a draw head with an automatic on it
4886 and substitute that for a link and pin draw head, but you would have to do that on both cars?

A. When the first vertical plane coupler was made, so it could be used in connection with link and pin couplers, it had a link slot in it, and with the pin hole.

Q. What was the purpose of that?

A. That was so they could use them in connection with the link and pin coupler, simply because it was an almost impossible thing to do, to change out all the link and pin couplers.

Q. Do you mean by that, so they could connect a coupler,—link and pin coupler, with one of the automatic couplers?

A. Yes, sir.

Q. That is perhaps what you meant when you spoke about using them interchangeably in connection and together that way?

A. I don't remember having that thought in view.

Q. That was a fact at any rate?

A. Yes, sir, I guess about 1897—

Q. Was it practicable to work them together that way?

A. Yes, sir, of course, it didn't fully comply with the Safety Appliance Law.

Q. I am speaking of practical railroad operation, what time did you say they began to come into general use?

4887 A. About 1893 or 4.

Q. Were any other changes made in draw bars besides that at the end of it?

A. In some cases,—not necessarily; the shanks were made to replace the M. C. B.—Master Carbuilder's—interchangeable coupler.

Q. Was it practical to convert the link and pin coupler into an automatic?

A. Yes, sir.

Q. Where did the difference occur between the old draw-bar link and pin and the draw bar that had the automatic coupler?

A. The difference was largely—practically all the difference excepting re-enforcing and improving of the draft rigging, is in the head of the coupler.

Q. To convert it from link and pin into the device that would work automatically?

A. Yes, sir.

Q. Was there any difference in the shank of the draw bar?

A. Not necessarily.

Q. Did the automatic type have the cushion behind it also?

A. Yes.

Q. And have the spring and yoke just as you have described it in the other type?

A. Many of them did, and many of them had what they called the twin or tandem spring; thus, for your information I
4888 would state,—this safety device, especially the vertical plane coupler, brought about wonderful changes in our draft gear.

Q. How were the draw bars attached to the draw sills—I mean in connection with the automatic coupler.

A. We didn't change the draft sills if they were in good condition; if all other draft attachments were in good condition, our draw bars were made to suit our equipment.

Q. And you bolted them through as you did the others?

A. Yes, sir.

Q. Were the connecting roads used with the draw bars that had the automatic couplers as with the link and pin?

A. I don't think they were with the Iron Mountain, but I did find them on the Kansas City Southern; the American Continuous Rod used in connection with the automatic coupler.

Q. The draw bar of the automatic coupler then consisted as I understand you, of the devices in the front, which constituted the coupler, then it ran back,—a casting at the shank—it was attached to a yoke, inside of which was a spring together with the front and rear plates, as you described it awhile ago, that is what the draw bar consisted of, wasn't it?

A. The only part of the draw bar that is in the automatic, it is either malleable iron or steel.

Q. It is a solid piece from the front where the link and
4889 pin or device for automatic coupling is, to and including the end you call the shank?

A. Yes, sir, excepting the hook, the knuckle that is attached with a pin, that is what makes the automatic connection, instead of the link and pin, that hook goes around.

Q. What I asked you is, if the part was the same as it was with the link and pin, except the changes made in the front end of it?

A. The shank is made the same as the link and pin, the master car builder's coupler.

Q. Then you say it was attached, in the Iron Mountain equipment here, attached to the draw sill or to the same timbers?

A. Yes, sir, attached very similar.

Q. Is that a complete description of both types of draw head?

A. I hardly — how *how* to answer that question; I think it is a very crude description; I could describe it better if you would let me take a pencil and a piece of paper, simply because if Mr. Rosing will put the questions, I will describe it because he is a mechanic and will describe how to put them; I would make a very poor job examining Judge Moore on the law.

Q. Any crudeness there is in it is owing to my ignorance of the subject.

A. I am trying to explain so you will understand it.

4890 Q. What are the contributing causes to that part of the expense of car maintenance, which is chargeable to starting and stopping?

A. Is it your idea to separate the two; what is the causes of damage from stopping, and the causes of damage in starting—they are different.

Q. State them separately, if they are?

A. The greatest difference caused by stopping the train to the vehicle, with our power brake, is the brake shoes, wheels and brake attachments, such as levers, and pins, and the car brasses.

In starting a train, all those parts are at rest practically; there will be your draft rigging in starting,—all draft attachments, and the body bolsters, their center pin connections, the truck, etc.

Those are the principal parts damaged in those two operations, but they are not similar; the parts affected in stopping are not the parts affected in starting.

Q. You spoke of center pins, what do you refer to?

A. That is where the car body bolster—there is two body bolsters in the car and two truck bolsters; the center of the body bolster sets down on the truck bolsters; there is where they get their greatest

thrust, unless they get off the track—is in starting, simply because there is where the car body has to move the truck.

4891 Q. Which contributes more largely to the cost of maintenance,—starting or stopping?

A. Maintenance of equipment?

Q. Yes?

A. Starting.

Q. Why is that so?

A. Simply because it throws the stress or tension on the entire draft rigging, and parts connected to it, which in the stopping is absolutely released.

Q. To what extent is that strain that you speak of affected by the weight of the loads, the cars?

A. That is increased very materially. I had made or joined in making some tests of that nature, Col. Moore, but the data escapes me now.

Q. Just state in a general way?

A. To make it intelligible, I would not undertake to express an opinion of what ratio of increase of expense would be attached to the increased tonnage.

Q. Is it negligible or considerable?

A. Where the variance in increase of tonnage of train is concerned, it is considerable, between the minimum and maximum,—very considerable; as I stated in my examination yesterday, each individual vehicle in the train has to take their proportion of the damages that applies to stopping; in starting, it is not the case.

Q. In the damage in starting, the damage grows fundamentally out of the strain produced by the great weight that is necessary to be moved.

4892 A. Yes, sir.

Q. And I take it from what you said just now, as that weight is increased the strain would increase proportionately?

A. Yes, sir.

Q. Take a train of ten cars, each car weighing 20 tons and put it opposite a train of the same number of cars, each car weighing sixty tons—that may be extreme but it illustrates what I want; I suppose that the strain and the injury from starting, liable to accrue in the two cases, would be very much larger in the train that was made of cars weighing 60 tons than the cars weighing 20 tons?

A. That would depend largely on the construction of the car; if the 20 ton car—if that was its maximum capacity.

Q. I am just talking about the car itself; leaving out all loading; I don't give that as the correct weights of the cars; I give it to illustrate.

Mr. HILL: Go ahead and complete your answer.

A. Ten cars of 20 tons each.

Q. And 10 cars of 60 tons each; I mean the cars themselves weighing that.

A. I don't think there would be very much damage in either case in starting those.

4893 Q. Whether it is much or little, I want to get whether it would be relatively to the weight?

A. To what,—to the cars?

Q. Yes?

A. It would not be any greater damage to start a sixty ton car than a twenty ton car.

Q. Wouldn't it require a greater force in motive power, in the power that starts it, to start a train weighing a thousand tons than it would require to start a train weighing one hundred tons?

A. But where you are speaking of the car and the car weighing sixty ton, that is built in proportion, and it won't suffer from being started, any more than the car that only weighs 20 ton.

Q. You don't understand the point of my question; the question I asked you is this; what is the effect of increasing the weight of the car or car's contents—of increasing the weight of the car, upon the strain involved in starting it?

A. It requires greater effort.

Q. And doesn't that greater effort produce a greater strain on the car?

A. It produces a greater strain on the car, but where there is that difference between the weight of cars, and if the car is built to stand that increased strain, and simply because a twenty ton and sixty ton car are stopped, there is a factor of safety in each case,—a

4894 sixty ton car won't be damaged any more in starting than a twenty ton car.

Q. What is the initial—the original cause of strain that is put upon the several cars embraced in the train,—what causes or brings about the strain put upon cars in starting?

A. The effort required to start the load.

Q. What represents that effort?

A. The locomotive.

Q. That is the visible representation of the effort?

A. Yes, sir.

Q. What effect would the differences in the power necessary to be exerted between moving a light and a heavy load, have upon the strain that is put upon the cars?

A. Well, there would be a difference, but what the ratio would be, I couldn't tell you off-hand.

Q. In point of fact, it is true, isn't it, that the strain and resulting damage, if you confine it to damage—to cars from starting, depends in its ultimate analysis upon the amount of force that is employed in moving it?

A. Not entirely, no, sir.

Q. I didn't say entirely; that is one of the elemental properties that enters into it?

A. Yes, sir.

Q. Isn't it the largest element?

A. No sir.

4895 Q. What is it that is more important?

A. The abuses it is subjected to.

Q. What do you mean by abuses?

A. I mean by abuses, rough handling, and irregularity in the track.

Q. Assume that it is handled properly, and the track is properly constructed, isn't the initial force exerted in moving an object, any standing object, the primary cause of the strain, and the largest element of strain that is put upon it?

A. Yes, sir.

Q. What I mean is that; if you have a train of cars—say 20 cars, loaded to their capacity, and in front of those cars you have an engine with a given tractive power,—you have another train made up precisely in the same way, the same cars, and same weight, and upon a track exactly similar, with in front of it another engine, with double the tractive power of the one I first mentioned, which would make the greatest strain in moving that train, the engine with the lighter or greater tractive power.

A. Same train, same weight?

Q. Yes?

A. I cannot see that there should be any difference.

Q. Why not?

A. Simply because it is not necessary for the engine because it has the power, to exert it.

4896 Q. Suppose the power is exerted?

A. I cannot see that.

Q. It may seem not reasonable to you?

A. It is impracticable.

Q. You have one train that requires a given tractive power to move it?

A. Yes, sir.

Q. And you have another train with precisely the same conditions, as far as track is concerned, which requires three times the tractive power to move it, and therefore, an engine to exert three times the tractive power of the one I mentioned, which one will put the more strain on the cars to move it?

A. The one that has three times the tractive power, that requires three times the tractive power to move it.

Q. What is the ratio of difference between them?

A. I don't know what the ratio is.

Q. Take the two cases I cited to illustrate; one train that can be moved with a tractive power which we will call one and another train that will require tractive power which we will call three; what I ask you is, which will put the greater strain upon the cars in the train #1 or 3?

A. Number 3.

Q. Why.

A. Because it requires it to move it.

4897 Q. And that additional exertion of force will necessarily put a larger or greater strain upon every part of the object which is resisting the movement?

A. Every part that is brought into use, as a part of the draft rigging and attachments, yes, sir.

Q. Of course, there is the necessity for the power; that is exerted

in moving any standing body, which is the resistance that that body itself affords; the greater the resistance, the greater the power necessary to be exerted in order to overcome it?

A. Yes, sir.

Q. And the strain increases correspondingly upon those parts that make or exert the resistance?

A. Yes, sir.

Q. And the strain or its effect will be proportionate to the increased tractive power necessary?

A. The strain will, yes, sir.

Q. Now, we'll take up the next element—you have spoken of starting, now the next element is stopping; express your views on that question; I asked you how the damage is produced and you have taken up starting and you referred to that, giving how the damage is produced on that.

A. The parts generally that receive wear and tear and damage in stopping—I do not call that damage but cost to maintain, as a result of stops.

Q. I am speaking of cost of maintenance as a result of stopping.

4897½ A. Brake shoes and wheels and brasses and brake rigging, levers and pins.

Q. Take those up in detail and explain how the damage is sustained on each one, say the brakes?

A. I don't know what you want me to say.

Q. I want you to tell me how the brasses are affected by the stopping of the train of cars.

A. The brakes being applied on the outside of the wheels, or on the inside, whichever the case may be, when the pressure comes against the wheels, it changes the position of the journal in the bearing entirely, simply because if you have an inside brake, you will press both wheels out, just like driving a wedge in between them, and if it is an outside brake, you are pulling the wheels together, which is not their normal condition when the car is either standing or moving, without the brake set.

Q. Is that increased or diminished by the momentum or weight of the object to be stopped?

A. Yes, sir, to some extent; I would give it as my opinion that it was increased.

Q. By both?

A. By the greater weight of the car, and the greater speed.

Q. The brakes now, how are they affected?

4898 A. The contact of the brake shoe and the wheels, the wheel and the brake shoes both wear, as a result of the brake shoe being in contact with the wheel in stopping the train; that is what wears the brake shoes out, and of course, the pressure being transmitted to the wheel, through the brake shoe, from the brake lever, and from the brake beam, naturally throws the shearing strain on the parts.

Q. Do you mean that that is a factor in that way?

A. In the stopping, yes, sir.

Q. Does that effect increase or diminish by the momentum and weight of the body to be stopped?

A. Yes, sir, the wear is increased by the high velocity which the train is moving, and the greater weight when the brakes is applied.

Q. What effect does the slack, what you call slack in the train, have upon the force necessary to be exerted in starting a train?

A. Well, it has a helpful effect to the head end, but a very damaging effect to the hind end.

Q. Explain that now.

A. If there was no slack in a train of 40 cars containing 1200 tons, with a locomotive attached to it, it would be almost impossible to get a locomotive of sufficient power to start those 1200 tons without some slack.

Q. That is what I want you to explain to me, how the slack helps it?

A. The slack assists the locomotive in starting the train, and a small amount of slack, I don't think is a damage to the train, 4899 but excessive slack, that was the result of the link and pin coupler, contributed very largely to the damage and wrecks.

Q. Explain to me how it did, in what way it contributed to it?

A. You take a cord and lap it between your fingers and you haven't enough strength between your two arms to break it—you take a cord that has a maximum strength to resist all the power you have in your two arms—but you take it and give it a quick jerk, and it will break; that is my illustration.

Q. I thought you said the slack paid out gradually and avoided that jerk?

A. No, if I did—I say the slack helps the locomotive.

Q. Isn't it this; isn't the greater injury which you say accrues, to the more remote cars from the engine, the result of increase of force that bears on it by reason of the momentum and velocity of the cars before it, in connection with the power of the engine?

A. I don't understand that question.

Q. What I mean is this: You exert the power necessary in your engine to start the cars next to it; those cars gain a velocity; then directly they gain a little more momentum, and that power is added to the power of the engine, and as you go back, there is a larger power produced upon the rear cars than the front, isn't that what produces it?

A. No, sir.

4900 Q. What is it?

A. If you have slack and slack extends all the way to the rear of your train, your locomotive perhaps has not power—the slack between the locomotive and the first car is not sufficient to pull the locomotive away from that car, but as she starts four or five, the slack increases, and as you go back a number of cars from the engine, you have the weight of the locomotive and all those cars on the others behind that slack, that has already increased, and that is just what I illustrated by the piece of string.

Q. That is just exactly what I submitted to you a minute ago; that is precisely the illustration I gave you.

A. But you have no slack with the vertical pin coupler.

Q. I am not talking about that; I am talking about slack; what kind of force would be required to move a train of 50 cars, that had no slack—50 loaded freight cars, that had no slack?

A. On level track?

Q. Just the ordinary track.

A. That is a mathematical question that is unfair to ask, unless you will give me time.

Q. I don't mean for you to answer it in figures; I mean, a greater or medium or low?

A. I don't know; I have pulled 110 cars with a locomotive 19x24, ten wheel engine, only carrying 160 pounds of steam, stopping and starting.

Q. The point I want to get at is this, whether a smaller tractive power would move a train where there is slack and where it pays out gradually from one car to another, than would be required if it was all made up with cars without slack?

A. It is possible to move more cars with the same engine or a greater tonnage, made up of a number of cars that has slack, than it is if the tension is tight up between them.

Q. I understood you to say awhile ago, if I misunderstood you, you can correct me, that assuming you wanted to move a train of 1200 tons on tension, without any slack you could hardly imagine the power that would be required in an engine to do it?

A. Yes, sir.

Q. Did I understand you correctly?

A. No, sir, I asked you, could you imagine it?

Q. What do you mean by that; didn't you mean it would be a difficult thing to do?

A. No, sir, because it is done every day, I expect, because the heavy tonnage trains with large tractive force in the engines, the question of slack is one that assists the engineer, but it is very injurious to the railroad company sometimes.

Q. In order to clear up any misunderstanding there is between us, would it require more power to move a given number of
4902 of cars in a train where there is no or very small amount of slack, than if it would with a larger quantity of slack?

A. To start them, yes, sir.

Q. Would it be practicable for you to give me an idea as to your view as to what the ratio of power would be, in such a case?

A. I couldn't do that; wouldn't attempt to do it, without a thorough test to get the draw bar pull.

Q. Are there any tables to cover that?

A. No, sir, but it could be ascertained by the use of the dynamometer car; those draw bar pulls, under different conditions are worked out accurately by an instrument made for that purpose.

Q. There is no fastening or attachment between the draw bars where you use the automatic couplers, such as there was with the link and pin?

A. Not to my knowledge, only as the connection is made between the center sill or draft sills.

Q. At the point where they couple together, at the point where the draw heads couple together, there is no connection—

A. No, sir, only the friction.

Q. If a draw bar is pulled out, one of the draw bars pulls out, it necessarily invariably falls on the track in the automatic draw bar?

A. They might if the yoke broke; there is a yoke or carrier that runs underneath the draw bar, just behind the coupler head proper, that carries the weight; if the shank broke off, it could slip over that yoke, but if the spring yoke was on the end of the shank, it could not.

Q. What I want to bring to your attention is this; when a draw bar pulls out, with the automatic coupler, it is more liable to pull out and fall on the track than the link and pin coupler?

A. No indeed.

Q. Isn't the link and pin coupler attached together; even if one of the ends should draw out, does not the link with pins hold them together?

A. They do sometimes, but they break.

Q. They do sometimes; it cannot possibly ever occur that way with the automatic coupler?

A. No hardly; I wouldn't think it could.

Q. What I mean is this; if a part that is entirely detached from another part breaks off, it cannot be held up by the other part?

A. No, sir.

Q. That is exactly the condition when one of the ends of a draw bar in the automatic coupler breaks?

A. I never recall of seeing an automatic draw bar pull out, but I have seen them broken off; the head broken off in the neck and fall down on the track.

Q. Hasn't there been very many devices patented to prevent vertical coupler devices falling down on the track when they break?

A. Not to my knowledge.

Q. You don't know that is a fact?

A. No, sir.

Q. You spoke yesterday about the increase in size of the cars, what has been the average increase in size of cars, what had it been up to within ten years, during the ten years before you quit railroading in 1904?

A. Their carrying capacity had been doubled, I will say, judge. Ten years before I quit railroading, a sixty thousand capacity car was considered practically the maximum—when I quit railroading, it was no uncommon thing,—in fact, I guess the greatest bulk of new freight equipment that orders was placed for, were specified a hundred thousand; probably in box car construction, eighty thousand.

Q. Forty to fifty tons?

A. Yes, sir, one hundred thousand gives a maximum loading of one hundred and ten thousand.

Q. The maximum loading ten years before that, would have been about sixty thousand or thirty tons?

A. When?

Q. I understand you to say ten years before?

A. Yes.

Q. There was an increase from six to ten?

A. Yes, sir.

4905 Q. That would be $3/5$ ths, I believe, in capacity?

A. Yes, sir.

Q. What increase in weight of the car was represented by that?

A. As a rule, in as great a ratio as the increase of the car capacity. The efforts of the designers of the Mechanical department was to design a car that required as little dead load as possible; the ratio of dead load as compared with the revenue tonnage was reduced, to the lowest possible limit; a sixty thousand capacity car, built about 1894, of course the type of cars, the weights would vary differently; that is, a gondola car,—coal car—would be very different from a box car that is the same capacity; a sixty thousand capacity box car would weigh about from 26,000 to 31,000.

Q. 26 to 31, you say?

A. They would run from 26 to 31. Metal construction has entered into that a great deal; a hundred thousand capacity car, of course, the dimensions would affect the weight considerably, 40 foot long, would weigh about from 38,000 to 42,000.

Q. That was an increase then of from 26 to 38 and 31 to what?

A. From 37,500 to 42,000. However, I think my friend Rosing will be able to give you more specific data in that direction

4906 than I can.

Q. What changes have been made in the construction and tractive power of engines, to enable them to pull those largely increased weights that are carried in cars having a capacity of 50 tons.

A. The tractive power of locomotives of general design, high steam pressure, has necessitated that, the weight be economized as far as possible, to save the structures; the tractive power of locomotives has been increased in about the same ratio or perhaps even greater ratio. While I wouldn't assume to be exact on that, simply because I have been away from those things for six years—

Q. I am speaking about the time you went out of the service?

A. Yes, but I have not been thinking about those things.

Q. I want to get at your idea about how the ratio of increase in tractive power of engines, compares with the ratio of increase in capacity of car?

A. Well, giving the people in charge of the mechanical departments on different railroads in the country—I would give them credit for exercising the proper judgment and increasing the tractive power to take care of the increased tonnage they were expected to handle.

Q. If the increased capacity of cars exceeded, as you said

4907 awhile ago, and was in larger ratio than the increase—

A. Not the increase of weight of the car proper.

Q. It would require—a larger ratio of increase in the engine than there would be required in the weight of the car, wouldn't it; I

mean, in the tractive power of the engine than in the weight of the car?

A. No, sir, I don't see any connection between the two.

Q. The engine has got to pull a given load, the load has nothing to do with the weight of the car, except as it adds to the total weight of the car and its contents?

A. Yes, sir.

Q. If you increase the weight of the car, we will say, 5%, and thereby increase its capacity 10%, you will have increased the weight of the car and its contents in a greater ratio than you have of the weight of the car alone; the engine has to pull them both, and what I want to ask you is, if it wouldn't require a larger ratable increase.

A. I cannot see where that applies, if you would call it all car load and all, what would be the difference.

Q. The difference that occurs to me is this; you might have a load that one horse can pull; you might have a load too large for one horse and it takes two—when you get a load that is too large
4908 for one, you *you* add another,—as you increase your load, you have got to increase your power to move it, as you increase the load of your cars?

A. The load of the train, but the load of the individual car you are speaking of, is two different propositions.

Q. I speak now of a train composed of cars?

A. The weight of the equipment is taken in consideration when they are loading the locomotive.

Q. Take two trains, one of which weighs 1200 tons, and the other one weighs 600 tons, which will require the largest tractive power to move it?

A. The one weighing 1200 tons will require the greatest amount of power exerted.

Q. If you increase the capacity of the cars, and don't increase their weight in proportion, you have got to increase the tractive power of the engine to cover both increases, haven't you?

A. No, sir, you don't have to increase the tractive power of your engine; you just cut a car off. I cannot understand where the connection comes between the car—it is my ignorance perhaps—where the connection comes between the individual car and the locomotive or the construction of either.

Q. I imagine that locomotives are constructed and changes in the construction of locomotives, are for the purpose of increasing their capacity; that is for the same reason as in cars—that is
4909 to pull the largest amount of cars that can be pulled by an engine?

A. The largest amount of paying tonnage.

Q. That is why you increase the capacity of the car; the question I asked you—you stated awhile ago, that where the capacity of the car is increased from 60 to 100 tons, the proportion is not preserved in connection with the weight of the car?

A. Yes, sir, the carrying capacity.

Q. I say you built an engine to carry just the number of loads

of that kind that is practical to operate an engine in front of, in order to do that, you have got to adjust the tractive power of your engine to the loads it hauls; if the tonnage is increased in a larger ratio than the weight of the car, isn't the power of the engine increased in a larger ratio than the weight of the car—of the several cars that make up the train?

A. I cannot see the connection.

Q. I will put the question another way; if the capacity of a car is increased and the weight of the car is not increased in proportion to its capacity, wouldn't it be necessary to increase the power of the engine in greater proportion than the increase in weight of the car?

A. I didn't mean to say that the capacity of the cars were increased in greater proportion than the weight of the 4910 car.

Q. That is what you said?

A. Well, yes, sir, I said it, but I want you to understand, and then I will answer your question—I won't attempt that now.

Mr. HILL: Go ahead and make your explanation.

A. My friend Rosing is trying to get Col. Moore to trip me; Mr. Rosing knows that he has staid up nights figuring on how to construct a car to increase her carrying capacity without increasing the dead weight of that car at the same ratio as he did the carrying capacity; that is what railroads sometimes keep people to do.

Now, in answer to Judge Moore's question here, it is necessary to increase the tractive power of a locomotive, just because they have increased the carrying capacity of a freight car,—I yet cannot see any connection whatever.

Mr. HILL: Let me ask one question there; are you speaking of that from a maintenance standpoint or from the operating standpoint?

A. From the standpoint of the best interests of the railroad company in every particular, both in first cost of maintenance and earning capacity. That aint the way they done on the Illinois Central though.

4911 Mr. MOORE:

Q. Were the 12 wheel engines in use on the Iron Mountain when you quit service?

A. Yes, sir, nearly all our freight engines were 12 wheels in two types,—ten wheel engines with six drivers—

Q. How did the power of those engines compare with the power of the engines used in 1890?

A. On this division, in 1890, when I came here as master mechanic, they had no—did you ask me 12 wheel locomotives or ten?

Q. 12 wheels?

A. I am in error, we had no 12 wheel locomotives.

Q. At what date do you speak of?

A. At no time during my connection—

Q. Were the 12 wheel locomotives in use at the time you quit?

A. No, sir.

Q. Were you acquainted with the 12 wheel locomotive?

A. No, sir, not in a practical way.

Q. You don't know their capacity?

A. No, sir.

Q. Did they have ten wheel locomotives?

A. Yes, sir, ten wheel consolidation type, eight driving wheels and one pair of pony trucks, and another type with six drivers and four wheel trucks.

4912 Q. When did you begin railroading?

A. In 1873.

Q. How did the engines you mentioned in your last answer, compare in power and capacity with those in use when you begin railroading?

A. They were about 30 years ahead of the west; in 1874, I was messenger on two locomotives that went to Renova, Penn., that were the same type of locomotives they are buying—I see new engines come in on the Iron Mountain now,—except they are larger now; they were the consolidation type, four driving wheels, and one pair of pony trucks.

Q. Is the air brake which you referred to awhile ago, applied on one or both trucks of a car?

A. Good practice is to apply it to all wheels.

Q. How was it with the old hand brake?

A. The old hand brakes, some had single and some double brakes; sometimes one applied to one truck, and sometimes,—depending largely on whose road the cars belonged on.

Q. How was it with the Iron Mountain?

A. The Iron Mountain cars—their owned cars, were nearly all equipped with what we called the double brake, the brake connected with both trucks.

Q. I believe all freight trains now are equipped with air brakes, that is the universal practice on large roads?

4913 A. Yes, sir, I believe so.

Q. This brake attachment, these brakes are attached to each car in the train, are they not?

A. Yes, sir.

Q. Will you state how many parts of machinery, the air brake on each car consists of?

A. Two air brakes, hose and couplings, consisting of 16 parts; two angle cocks, consisting of 16 parts; one train pipe, consisting of two parts; one strainer, consisting of five parts; one cut out cock, consisting of five parts; one triple valve, consisting of 34 parts; one air reservoir and brake cylinder, consisting of 16 parts. One retaining valve, consisting of 7 parts; one release valve on reservoir, consisting of 6 parts; one branch pipe, consisting of two parts; 4 clamps to secure train pipe, consisting of 8 parts; one pipe from triple release to retainer, 2 parts; one release pipe union, consisting of 3 parts; total 122 parts.

Q. Does the sheet I hand you contain a cut of the triple valve?
A. Yes, sir.

4914 (Here follows cut marked p. 4914, omitted in printing.)

Mr MOORE: It is agreed that copies of cut referred to in the last question and answer, will be furnished the clerk to be used
4915 in making up the transcript, if it should be necessary to prepare a record for appeal in this case, and that the duplicate copies may be used in the record.

Q. This brake is for the purpose of conducting and applying compressed air, is it not?

A. Yes, sir.

Q. Do the parts necessarily have to be made and maintained air tight?

A. Yes, sir.

Q. And all those parts you have mentioned are attached to a car—that is every freight car?

A. Yes, sir.

Q. All those parts perform a service every time the brakes are set to make a stop, do they not?

A. Yes, sir.

Q. This air brake has all been added to the cars since the day that Mr. Wellington wrote his book in 1877?

A. The automatic.

Q. I speak of this device I have called your attention to?

A. Straight air was used before, but it was not applied to freight equipment.

Q. These appliances I have called your attention to, have been added to freight cars since that time?

A. Yes, sir, all air equipment,—has been added within
4916 the last twenty years I guess.

Q. Have you ever read Mr. Wellington's book, are you familiar with it?

A. Yes, sir, but it has been several years since I read it, not having any occasion to.

Q. You spoke of contributory damage, on account of drawing out of drawbars, and that you had known severe and expensive freight wrecks as a result; you are referring to freight wreck damage?

A. Yes, sir.

Q. What is the wheel base of the large freight cars now?

A. Do you mean the total wheel base, or the wheel base of the truck?

Q. The total wheel base?

A. I don't know now.

Q. Didn't you state yesterday the trucks were about 25 feet apart?

A. From center to center, I said practically.

Q. The wheel base would be counted from center to the outer wheel?

A. Yes, sir.

Q. That would make it about 32½ feet.

A. I don't know what the centers are—33 inch wheel, the truck oughtn't to be more than 5 foot six and the centers,——

Q. That would be 30½?

4917 A. Yes, sir.

Q. What is the wheel base of the engine, the driving wheels of the engine?

A. The total or driving wheel?

Q. Driving wheel.

A. The consolidation engine, the driving wheel engine base is about 13 feet six, or 13 feet; it depends upon the diameter of the wheel.

Q. You stated in your examination in chief, that a locomotive is derailed, excepting the tender, less than any vehicle in the train, owing to its being counter-balanced and the weight equalized; now in view of the wheel base that you have given of the car, as compared with that of the engine, can you say that the weight is as well equalized on the engine as it is on the car?

A. Did I state it in that way?

Q. Here is your testimony.

A. It is in there, but not in the way I understood you to read it; the "locomotive is derailed, excepting the tender, less than any vehicle in the train, and owing to a locomotive being counter-balanced, the weight equalized, so that it can transfer from one wheel to the other, to take care of the irregularity of the track, which is not the case with a freight car, load- it with—I
4918 didn't say that was the reason it was derailed less, I just made the statement that it was derailed less than any other vehicle in the train.

Q. Is it a fact that the weight is equalized, in view of your statement of the relative wheel base of a car and engine, as well on the engine as it is on the car?

A. That is misleading. The weight of a locomotive is better equalized on its wheels than it can possibly be on a freight car; there is nothing said about the distribution in that.

Q. What is the distribution then?

A. The distribution on the track or on the structure, a given length of track has to maintain a greater load under a locomotive than it does under a freight car, but owing to the system of equalizers, and springs, the wheels compensate themselves; the load don't shift, but the wheels shift; the wheel will come up and the locomotive won't come up; if the freight car wheel goes in a hole, the car goes in a hole.

Q. Is the car without any springs at all?

A. No, sir, it has springs too but no equalizers.

Q. What is the equalizer?

A. It is that, that transmits the depression from one point to another.

Q. Describe it to me?

4919 A. That represents the three wheels of a locomotive on one side; there is a spring on top of the box; those are equalizers running from one spring to the other; these saddles running

down through the spring to the driving box, which rests on the wheel; when the wheel goes in a hole, this spring goes down, but the locomotive don't go down, simply because these two holds it up. I have seen those in that position, but your locomotive is standing level, simply because the locomotive is swung on a spring,—that is, on these equalizers; the car construction is altogether different; the car sets on a four wheel truck, on a bolster that has springs, and they have no connection with the wheels at all; the springs are nothing only compression springs.

Q. A very much large-number of cars, of course, are used in freight service than engines?

A. Yes, sir.

Q. Do you say that more cars are derailed in proportion to the number of cars used, than engines in proportion to the number of engines used?

A. Yes, sir.

Q. You stated yesterday, in the same connection, that "Take a one hundred thousand capacity freight car, load it with one hundred and ten thousand pounds of lading, weighing about 140,000 pounds of itself; it has eight points in contact on the rail, distributed from one center to the other."

You meant to state there, didn't you, that the car and 4920 contents weigh 140,000 lbs.?

A. That is what was contemplated.

Q. So the weight of that car and its contents is 140,000 lbs.?

A. Yes, sir.

Q. Now, that is a modern car you are talking about?

A. Yes, sir.

Q. What would be the weight of the old type of car and its capacity, before their capacity was increased and its contents according to its maximum capacity; I want to get the increase of the weight of the car and its load?

A. A 60,000 capacity car, as I stated,—box car, and gondola cars vary, there is a difference between the dead weight of the car for a given capacity.

Q. Well, say 20 years ago, 25 years ago, in the times that Mr. Wellington wrote, 1877.

A. 25 years ago, there were no 60,000 capacity cars on the Iron Mountain.

Q. What were they?

A. Most twenty and thirty and forty thousand capacity.

Q. What would be the weight of the car itself?

A. I don't remember; the most of the Iron Mountain equipment 25 years ago, freight equipment was not to exceed twenty to thirty thousand capacity.

Q. What was the weight of the engine of those times?

4921 A. The weight of the engines those days, was about sixty thousand pounds, from 26 ton- to 35 tons.

Q. Now, the cars have increased until they have a capacity and weight with their contents that you mentioned in the latter part of your testimony I quoted you awhile ago, 140,000 lbs.?

A. Yes, sir.

Q. Isn't it a fact that the weight of those large engines now, is over 200,000 lbs.?

A. Yes, sir.

Q. So the weight of the engine has been increased in a very much larger ratio than the weight of the car and its capacity?

A. I guess they have.

Q. I hand you a circular, called general instruction #16-a of the Iron Mountain Railroad,—Missouri Pacific and Iron Mountain Railroad, classifying the lines over which various locomotives on the system may be operated,—the bridges have been divided into four classes; the number of the engines which may run over each class of bridges are given; "Engines not listed in this table shall not be run over these bridges without special authority from the Chief Engineer Maintenance of Way."

Will you attach it as Exhibit K-1 to your deposition?

A. Yes, sir.

4922 For Exhibit K-1, see Vol. 9, page 5884.

Q. Why is that classification made?

A. Owing to the condition of the structures, I suppose.

Q. Look over it and explain to me in what way the condition of the structures would render it necessary to issue that circular?

A. I am not familiar with these locations.

Q. Isn't it because there are certain parts of the line, and certain structures, in the way of bridges, that it would not be safe to run certain classes of engines over, which are excluded from certain parts of the line and bridges over them?

A. It is because the condition of the structures won't warrant operating that heavy a locomotive over it.

Q. Is there any such classification or exclusion in regard to cars?

A. Not that I know of; I don't know of any such instructions being issued.

Q. Did you ever know of such instructions in regard to cars?

A. No, sir.

Q. What do you refer to when you speak of a locomotive being counterbalanced?

A. I mean the wheel made so to counteract the weight of the crank pins and the proper proportion of the weight of the rods, that is attached to the pins in the wheel.

4923 Q. Why is it necessary to make any particular construction for that purpose, why is there any construction of an engine that renders that necessary to counterbalance it.

A. There is not anything in the construction of the locomotive that renders that necessary, but for a locomotive to be constructed properly, it is necessary for that feature to receive care and attention.

Q. That is the question I asked you, why is that necessary?

A. That is to avoid the hammer blow, that would result from that part of the wheel coming down and hitting the rail.

Q. That is what you call pounding?

A. It is generally termed the hammer blow.

Q. I frequently hear the expression made as pounding; Mr. Alexander used it yesterday; that is what is referred to when they say an engine is pounding?

A. If I would speak of an engine pounding, I would think that was in the machinery of the engine, pounding in the boxes.

Q. You call it hammering?

A. I call it the hammer blow on the rail.

Q. What effect does that have, what tendency does that have toward derailing engines?

A. It might contribute to derailing by breaking of rails—
4924 something of that kind, but I don't think that that would have any tendency to derail the engines.

Q. Do engines bend rail?

A. Yes, sir.

Q. Do cars?

A. I don't know, not to my knowledge.

Q. What causes that hammering, that you say has to be remedied—you said but for this counterbalancing it would produce a hammering on the rail?

A. It would produce a hammer blow upon the rail from revolution of the wheel.

Q. What is it that produces that?

A. Because one side of the wheel is heavier than the other.

Q. Why is that?

A. Because it carries the crank pin and proportionate weight of the rod that carries the crank pin.

Q. That destroys the balance of the wheel?

A. It would, if it wasn't properly balanced.

Q. Unless it is guarded against, it will destroy the balance of the wheel?

A. Yes, sir.

Q. What is the weight of that crank and rod?

A. I don't know; you give me the specified engine, and I will give you the weight.

Q. I mean the usual engine—just take an average?

A. I cannot tell you; I don't think it is fair to ask that
4925 kind of question either. There is a question there about the bent rail, I would like to ask you when you ask about a bent rail, in what direction is the rail bent?

Q. I don't know; you can state the direction yourself.

A. Locomotives have bent new rails laterally and the bending vertically is done by soft track and weight of the cars or locomotives either, where the ties are bad, or not properly supported.

Q. If a locomotive bends a rail laterally, it is—

A. That is a defect in construction.

Q. Does that not sometimes result in derailing the engine?

A. I never knew of it; it destroys the rail.

Q. Do the builders of locomotives design their wheels for the purpose of counter-balancing the weight of the driving rod,—side rod?

A. Yes, sir.

Q. What do they do that for; in what way is that done?

A. By adding an increased amount of metal in the rim of the wheel, or between the spokes at opposite points.

Q. This side rod revolves, doesn't it, on the driving wheel?

A. No, sir.

Q. Doesn't the crank revolve?

A. Yes, sir.

Q. And the driving rod follows it up and down?

A. Yes, sir.

Q. And the end of the rod goes up and down with the revolutions of the crank?

A. Yes, sir.

4926 Q. What are the reciprocating parts of a locomotive?

A. The piston, cross heads and main rod—one half of the main rod, the weight of it is usually added in to the reciprocating parts.

Q. Now does that have any effect on the balance of the wheel?

A. Yes, it all has to be taken into consideration.

Q. What is the excess of balance created in that way—isn't there about 66% of excess of balancing created by these reciprocating parts—the piston and cross head and the piston rod?

A. I don't recall just what the ratio of weight is now.

Q. How does the piston rod move—it moves back and forth doesn't it?

A. Yes, sir.

Q. Now in view of these conditions to which I have called your attention, I want to ask you if it isn't practically impossible to produce a perfect balanced wheel?

A. For all builds, yes, sir.

Q. Doesn't that want of balance and want of reciprocation or want of balancing growing out of this rod and these reciprocating parts always produce that hammering of which you speak?

A. Should not.

Q. Did you say that engines that are used to-day, even properly constructed engines are free from hammering or pounding?

A. If the engine is properly constructed—counter-balanced for maximum weight, it should not do any pounding—should
4927 not deliver that hammer blow to any perceptible extent without operating it at a speed in excess for which it is counter-balanced for.

Q. Isn't it a fact that on account of this counter-balancing, that in practical operations railroad tracks are frequently very badly damaged by the pounding or hammering of the engine?

A. There was a time before the locomotive builders and railroad mechanics began to recognize that defect and cure it by proper counter-balancing the engine.

Q. Mr. F. P. Ward, the General Manager of the C. B. & Q. road testified in this case a few days ago, and Mr. Carl Gray, General Manager and Vice President of the St. Louis & San Francisco R. R. Co. also testified in this case afterwards, and both of them testified that was the case, and that the track was frequently very

badly damaged, and it may cause many times more damage than might accrue to it from any other causes by reason of improper balancing of the wheels producing the hammering—would you say these gentlemen were not speaking correctly—either advisedly or in any other way?

A. No, I would not, but I would say this, if such is the case, that locomotives were being operated at a speed in excess for which they were counter-balanced, over which Mr. Gray or these gentlemen have no control—I am speaking not only as a mechanic, but as a locomotive engineer. Take the same locomotive and run her over a bridge, especially a metal bridge on a frosty night, is when you will hear the hammering blow, you will never hear it going up hill.

Q. Isn't it a fact that this excess which I am informed is 66%, is divided between the driving wheels, on account of the reciprocating parts, does necessarily result in preventing any engines from being perfectly balanced at any time and at any speed it may be running?

A. No, sir, I don't think so.

Q. Isn't that excess balancing always in the wheel at any speed it may be going?

A. Yes, sir.

Q. Isn't it that which causes the hammering?

A. Yes, sir.

Q. You stated in your examination in chief that the engine has practically been worn out in through freight service, as a general rule, and it is then put in local freight service to be utilized there before going into the shop, to get all out of the engine that could be gotten out of it. You say on the same page that the expense for keeping the engine in service should be no greater than to keep a through freight engine in service?

A. Yes, sir.

Q. How can you reconcile the statement that an old engine that has been worn to the extent of 75% can be kept in service at as little an expense as an engine in through service—as the class of engine and the condition of engines that are used in the through service, as you have described there?

A. Simply because the service is not so severe.

Q. You say this, that an old engine which has been three-fourths worn out can be maintained at less expense in local service than the same engine put in new and up to the time it was put in local service could be maintained in through service?

A. I did not say that.

Q. I am asking you that now? Did you say that?

A. I did not.

Q. Isn't that the effect of your statement?

A. No, sir, I said it would not cost any more.

Q. What did you refer to when you say—what character of service in pulling through trains, did you refer to when you say the service is less severe on the local trains?

A. Not nearly so heavy tonnage, and practically operated in the

day time when the rail is good and the time is not so fast—the local freight service is slow schedule.

Q. You are the only witness, except Mr. Alexander, who has testified in this case on either side, who has made that statement, all the other witnesses on both sides have stated that between stations 4930 the local freight runs faster than the through freight. Isn't the speed of the engine—isn't it the speed of the engine that does it the damage rather than its load within its pulling capacity?

A. No, sir, not necessarily.

Q. What effect does the switching service have upon the engines that pull local trains?

A. They only have a very few cars—that is not severe service, and we could not put them in our terminals and take hold of heavy trains and switch with them.

I will give you an idea where I take a great deal of this from; I was an engineer in local freight service on the Iron Mountain road, and didn't go to a shop in a year. I did all the repairs, in fact, most of the engineers that were in local service that led away from shop terminals those days had to do that—did all the repairs themselves, even washing out their own boilers, and I know I am speaking from actual experience, both in operating locomotives and in after years caring for them.

Q. How long ago was that?

A. 1884.

Q. What road was it on?

A. Iron Mountain road.

Q. The character of the service the same as it is now?

A. There might be a few more stations on the same territory now, that was between Bismark, Mo. and Popular Bluff, Mo., over 4931 the hilliest part of the Iron Mountain railroad—a 17x24 engine, I ran her there for 13 months and she never was at a shop.

Q. She must have been an exceptionally good one.

A. They all did it them days. You spoke of Mr. Gray, whom I used to know very well, and also Mr. Ward,—I don't believe either one of them ever ran a locomotive or ever made repairs on a locomotive, or if they were supervising it, would know whether it was properly done or not.

I do not put myself up against them in their testimony, but what I say here, I say nothing but what I know, and if I don't know it I will decline to answer.

Q. Doesn't the operating man who is in charge of, and who is responsible for the expense of operation, while he doesn't run a car or doesn't fire an engine, does he not necessarily, if he is efficient in the discharge of his duties as operating official, keep a close watch on the operating expenses, or operation of the various departments, and in its application to various departments?

A. As a total, yes, but in detail, no.

Q. Do you say that Mr. Gray doesn't know what the cost is of the various branches of service that he superintends and directs?

A. I will answer that by saying this—Mr. Gray's reputation is no

better than Mr. J. T. Harahan's, and there was six million dollars that was reported that was charged up to repairs on the Illinois Central Ry, and they never discovered it.

Q. Who was General Manager at that time?

A. Mr. Harahan's son, I guess.

Q. Why didn't they discover it?

A. I don't know.

Q. It was reported to them?

A. It was reported the money was spent, and no doubt he would come up and swear it cost that much to maintain freight cars in that year.

Q. Do you believe that Mr. Carl Gray, from what you know of his character, would not have discovered that and remedied it, if he was in the position of the officers who ultimately discovered it?

A. I will say this, that Mr. Carl Gray has got to refer to figures that he receives from some one else.

Q. You are speaking about the officials to whom the information was taken that the pecculation to which you refer was going on, and were informed, did not discover that, do you believe Mr. Carl Gray wouldn't have discovered it?

A. I am not putting it in that way.

Q. That is the way you did put it.

A. No, I did not.

Q. The evidence in that case shows those things were reported—

A. I know J. T. Harahan would never have permitted
4933 a thing of that kind if he had been cognizant of it—a man whom I have known for thirty years, and he didn't like me at all, but he would not have had a thing of that kind going on. He is reputed to be as bright as any railroad man we ever had in this country too.

I know from my own experience, the man who spends the money is not permitted to distribute it—distribute the expense. I, as Master Mechanic over here, was not in position to say that so much money was spent maintaining such and such a locomotive, but it was bunched by reports, go to St. Louis—those reports are consolidated in the Auditor's office and they distribute such expenses, so much to switching, so much to local and so much to through freight, so much to passenger and so forth, that was my experience here. A general Manager in all good faith could say those figures were so and so, but they would not be so, because they do not reflect the actual expenditures.

Q. Do you know how these accounts and expenditures were kept in 1907 on the Iron Mountain Railroad—you have just now stated everything was bunched?

A. No, I do not, I wasn't here.

Q. Isn't the superintendent of a road—I don't mean the General Manager, but I mean the superintendent,—on the road back and forth on his line all of the time, and isn't he in a position to acquire a knowledge of the details of the business—I am referring now to Division superintendents.

4934 A. Never on any road that I was ever connected with.

Q. These gentlemen you have spoken of went up through all the various grades—I don't remember now, but Mr. Ward was in a great number of grades, Mr. Gray in not so many, Mr. Gray was Division Superintendent of a railroad, and Mr. Gray testified that his experience justified him to testify about these matters, would you say his statement in that respect was not true?

A. No.

Q. That was his own statement.

Q. I would just say that it was just an error in his judgment, that is all, I don't believe Mr. Gray would testify to anything he believed was untrue.

Q. When you were Master Mechanic of the Iron Mountain Railroad, didn't you distribute your expenditures to the different accounts?

A. Yes, sir.

Q. You knew what they were?

A. Yes, sir.

Q. You reported them?

A. Yes, but the Auditor's report to the General Manager did not reflect the report I made to the Superintendent of Machinery's office.

Q. How do you know that?

A. Because the General Manager in ninety days used to furnish us with a report.

Q. That service ended on the Iron Mountain in 1899 with you?

4935 A. Yes, sir.

Q. Do you know what the conditions have been since then?

A. No, sir.

Q. You take something that has become familiar now, more familiar to the public than a railroad locomotive—if you were to buy an automobile and run it until it was three-fourths worn out, what effect would that have upon the expenses or current maintenance?

A. It would depend largely on how much service I subjected it to.

Q. Suppose you subject it to just such service as would relatively obtain as comparing an engine in through freight service with an engine in local service?

A. Now an automobile is something I never owned and had anything to do with.

Q. I refer to that because an automobile is made up of machinery—

A. Yes, but the conditions under which it is operated is no comparison, simply because it never goes over the same road the second time, and is run over bumps and ditches largely—

Q. It runs over the same kind of bumps as it did when it was new?

A. Not necessarily.

Q. I imagine it does,—we will assume it does, because we know that an engine runs over the same bumps, if it runs on the same road?

A. No, I don't think the illustration or comparison is a fair one.

Q. Lay that comparison aside, do you think on reconsideration, it is fair to say that an old three-fourths worn out engine can be kept up at the same expense that a new engine, or an engine that is in use when it is in its better days—

A. I mean to say that a locomotive totally unfit for through freight service, on account of defects, leaky flues, treadworn tires, can be operated in local service just as cheaply as a good locomotive can in through freight service.

Q. And run at the same or higher rate of speed?

A. I don't understand that—I don't understand Col. Gray says that.

Q. Assume that it does?

A. I don't assume that.

Q. For the purpose of the question, assume that it does run at a higher rate of speed between stations, would you say that would contribute anything to the cost of repairing a locomotive?

A. It might contribute to the cost of repairing switches and rails on account of the worn condition of the tires.

Q. Is it not more damaging to the locomotive in running at a high rate of speed than at a low rate of speed?

A. Not necessarily, unless she is run at an excessive rate of speed and creates excessive friction.

Q. Does it require any more fuel to enable a locomotive to pull 32 loaded cars than it does 16?

A. I should think so.

4937 Q. How much more do you think it would require?

A. I would have to know the conditions under which the locomotive was operated—start two locomotives, one following the other and running a given mileage, one following the other, one with 30 cars and another with 16, the one with 16 cars would burn less fuel.

Q. Can you give me in a general way the percentage of difference?

A. No, sir.

Q. Do you believe that 3½ per cent would cover it?

A. I can't say because I never have had a case of that kind under my observation, and of course I would not attempt to state what the percentage of difference would be.

Q. You said the conditions on the Iron Mountain Railroad in Arkansas were about the same—the physical conditions—as the Cotton Belt; Do you know anything about the White River Branch of the Iron Mountain?

A. I did not mean to say that, I don't know that I testified as to the physical conditions of the other road.

Q. "If the tonnage handled or cars handled, were the same, I consider the conditions and contour of the country very similar; I would be willing to accept the test made on the Cotton Belt as a fair representation of what could be done on the Iron Mountain or vice versa."

A. That was operating conditions, not physical conditions.

Q. Wouldn't the physical conditions have some effect on it?
 4938 A. I wasn't taking that into consideration.
 Q. Take that into consideration now and say whether they would have any effect?

A. I say it is a fair test.

Q. Was your attention called to the fact that one of these tests was made in October, 1908, and the period to which it was sought to be applied was in another year—different year?

A. Yes, sir.

Mr. HILL: Corresponding month though Mr. Moore.

By Mr. MOORE:

Q. You said: "Unless conditions have been changed very materially, since I was in the service, the poor local does not receive the same attention as the through does."

Now you were in charge of that service when you were on the Iron Mountain Railroad were you not?

A. Yes, sir.

Q. Why did you neglect the local?

A. I didn't neglect anything intentionally.

Q. Why did you speak of it as "The poor local" not receiving the same attention—local engines are always in terminals at nights?

A. Our shops, as a rule, are not operated nights, we just run a Round House force, to do what you call running repairs. On through freight engines and passenger engines that are in there at night, they are given preferred attention, because a defect that would delay a through freight train—heavy through freight
 4939 train or passenger train, would have to be given attention, that if the same defect existed on the local engines, they could be allowed to go for another trip without any necessary delay. All the employes in the round house are given to understand they must give the engines for immediate service, preferred attention—or used to be.

Q. This is Round house expense?

A. Yes, sir.

Q. And it is just simply to cover the attention that is given trains—engines in passing?

A. No, sir, running repairs—an engine comes in this evening we will say at seven o'clock, and they are due out to-morrow morning at 7:30, the shops are not in operation, and there are only those repairs that can be made—hand repairs.

Q. The shops are not required to do hand repairs?

A. They do a great many repairs in the day time that the work is done in the shop, except the application of it.

Q. These repairs that you speak of—conditions that you speak of, that is given to the engines in actual service while they are laying off between times, while they are not in the service—take the local, it comes in at night and goes out in the morning?

A. And the through freight and passengers—the through engines come and go in the same way.

Q. The local train doesn't run at night?

A. We never had any night locals when I was with them.
 4940 Q. So the local would be in the Round House 12 hours, from seven in the evening until seven in the morning?

A. Those were not the conditions that prevailed when I was over here. Our locals were on the road a good many hours—leaving one time perhaps in the morning—

Q. I am not caring about the regulation as to the time they should run, but they would be there during the night?

A. Yes, the local schedule was about 12 hours.

Q. Take the through cars, did your through cars lie there that way?

A. Through freight engines came in any time during the 24 hours. When I was there, our through freight engines was in what we called "chain gang," that is, we had no regular crews for them, and when a through freight engine would come in, there was a train waiting for her, just as soon as we could get her out. Her work report was gone over, an inspector was put on the engine to make an inspection of it, of the driving boxes, brakes, and such things as were necessary, and any repairs that were necessary, all that was perceptible, that would contribute to the delay or liable to contribute to the delay of that engine, was done.

Q. Your chain-gang perhaps was there for the purpose of having a gang ready for that engine?

A. No, sir, the chain-gang was necessary, because we did
 4941 not have a sufficient number of engines to handle the business—

Q. You wanted to get it out as quick as you could, and therefore you did not detain it any longer than necessary to get it out of the Round House?

A. I said we made a close inspection and examined the engineer's work report, and our help was concentrated on that engine to get the work done—every thing done, every defect that was apparent, that was possible that would operate against that engine making a successful trip; while the same defects operating on an engine in local service would be allowed to go until she came back again.

Q. How long would you keep an engine in through service in the round house?

A. Just as soon as you could get them ready to go.

Q. The idea was to get them in and get them out as soon as you could?

A. As soon as you could make repairs.

Q. You wanted them for service as soon as you could get them?

A. I have seen eight trains waiting with only one engine in sight.

Q. In view of that condition with respect to the time that you could spare the engine pulling the through freight in through service as compared with the all night lay over of the engine in local service, notwithstanding you might have felt the impossibility of keeping your engine in through service up, didn't
 4942 you have more time and more opportunity with your night

round house crew during the entire night to get the local train running?

A. No, sir, it wasn't many times the local engine ever came into the round house at all, we would just put her on the turn table and turn her around, so as not to obstruct the cinder pit and delay the through freight engines, and we would back her over on some dead track.

Q. What did that service consist of, wiping and cleaning her down, and things like that?

A. No, sir, there was very little wiping done. The service consisted of any repairs that was necessary, very often found from the inspection or the report of the engineer.

Q. What is the character of the injury to passenger coaches, express, mail and baggage cars, to which you refer, when you spoke about the expense of maintenance in connection with—you spoke about the order in which these cars were in the train, and about the expense and damage accruing, to what part of the cars is that expense applied?

A. The draft gear, underframing and trucks, and the exterior finish—roofs, damaged as the result of cinders, and the varnish.

Q. What is the most perishable part of the car or coach?

4943 Q. Of the exterior—outside of the interior?

A. I would consider the varnish.

Q. How about the platforms and vestibules?

A. Under recent construction, the platforms and vestibules—

Q. Take it as to the time you were in the service?

A. The modern cars built when I was in the service?

Q. Yes, sir.

A. Owing to the changed construction—steel platforms, very little expense was attached to maintaining passenger coaches—that part of them—

Q. What does the impact of stopping the trains tend to have upon the platforms and vestibules?

A. Well, stopping a train—

Q. That is very wearing on cars?

A. Yes, sir.

Q. And have no support?

A. Yes they are supported.

Q. Except by projecting appliances—what I mean is they have no foundation as the body of the car has?

A. The recent construction had, and built like the old ones, the intermediate sills in some cases ran through but with the passenger train—there is where the iron brakes comes in again—there is no reason why that the tension of the springs in the passenger trains, that the stopping of the trains should damage them, simply because when the brakes comes on one car, they come on them all. I think in the passenger train,—like a freight train, the greatest damage is done in in starting, since we have had the power brake—

4944 Q. Where is that done?

A. At the draft gearing and attachments, of course the severest stress is on the cars nearest the locomotive.

Q. Why is that?

A. Because they have to take the greatest strains, pulling the greater load.

Q. I don't understand just what you mean by that—suppose a baggage car, mail car or express car is loaded less heavily?

A. Yes, but they have to pull the coach, and it is loaded, and the passenger car has no connection with the locomotive only through the baggage car and mail car—

Q. There is *of* platform on those cars?

A. No, sir.

Q. Are the trucks or wheels, are they connected with the body of the car?

A. No, sir.

Q. Practically separate?

A. The car floats on it.

Q. You spoke of the damage to trucks and things like that, do the trucks really receive any strain in moving, don't they move, you might say, almost automatically with the body of the car?

A. In stopping the truck stops the car, and in starting, the car starts the truck, simply because the brake is attached to the track, and the draft power is attached to the body.

4945 Q. Why are the superior cars of the passenger cars—Pullman cars and parlor cars of these fast fine trains you find on the eastern roads, and all roads as far as that is concerned, put in front close to the engine?

A. I don't know.

Q. Isn't the only reason in order to avoid cinders?

A. I don't know.

Q. Isn't the deposit of cinders worse a few cars back than on those immediately up close to the engine?

A. They will keep rolling over the cars until they fall off, but they hit hardest up close to the engine.

Q. Haven't you known persons to go from the rear car up near the front in order to avoid cinders?

A. No, sir, I have never heard tell of such a suggestion before. The first time they hit, they cut the hardest, that is when they hit the hardest.

Q. The direction of the cinders depends upon the wind doesn't it?

A. No, sir, the smoke does to a large extent.

Q. Don't you know the cinders also go with the wind? What was it that burnt up all this cotton at New York a few years ago, except the wind blowing across the track?

A. To qualify my statement there, that depends upon the velocity of the locomotive.

Q. Wind too I reckon?

A. Yes.

4946 Q. So you may say it is about as uncertain as the wind?

A. A passenger engine running at an ordinary speed, the wind doesn't have much effect on the cinders.

Q. Don't know whether you ever have played golf or not, but if you ever have—my friend Judge Hill will testify on the point—if

you ever played golf you know when you strike your ball it goes up some considerable distance before it comes down; with me it will go about 50 feet, with Judge Hill, probably three or four hundred yards; doesn't it come out of the engine and do the same thing, when it comes out it comes with great force and rises and don't the greater part of them go further back than these cars immediately in front before they fall?

A. I never played golf, but you don't knock that golf ball and guide its force, and therefore, don't put as much force into it, the cinders out of a locomotive are discharged from a tube, and it really guides its force.

Q. Are the cinders not propelled from the smokestack with greater force, and upward?

A. Yes.

Q. How does the wear and tear on a passenger coach compare with the baggage and mail and express car, I mean the expense, considering the character of the operations, if they are to be kept up and maintained?

A. What would you be allowed to take in, in that wear and tear?

Q. Take in everything.

A. The entire car?

Q. Yes, sir.

4947 A. That is maintaining the car in service?

Q. Yes.

A. Not including the repairs when the car goes into the shop, that is just for maintenance?

Q. Yes, I mean to include everything.

A. Well, owing to the greater length, the greater amount of glass and lamps, etc., the coach, if a first class coach, for the same number of miles, covering a period of years, would cost more to maintain it than a baggage car, but there is really not very much difference excepting when you take in the difference of length and your inferior finish of the coach, and the baggage car being about 50 feet long and the coach about 75 feet.

Q. You state in your examination in chief, you made this statement, referring to cleaning and handling cars and service of that sort, I quote from your testimony at the bottom of page 56, you were asked if the cleaner was not like a pooh bah, and you said when you had nothing else you could charge the expense to, you could charge it to that, and employ a man to work in your office—you just hired a man and called him a car inspector, or a car cleaner and put him in the office to help out. Did you follow that practice while you were Master Mechanic on the Iron Mountain road?

4948 A. Yes, sir.

Q. You stated yesterday that you were discharged by the Iron Mountain road?

A. Yes, sir.

Q. Wasn't that one of the things that caused your discharge?

A. No, sir.

Q. Do you call that proper practice?

A. That is obeying instructions of your superior.

Q. Does any such practice as that exist on the Iron Mountain railroad today?

A. I don't know.

Q. Wasn't complaint made about that matter, among other things, at the time you were discharged?

A. In justice to myself, I think I am entitled to an explanation of why I was discharged, since you have brought the subject up.

I was discharged for obeying the instructions of my superior to transfer of money, both labor and material expended in building road devices—charge them to locomotive and cars without authority from the Auditor's office. Mr. Reardon gave me verbal instructions that all in excess of what the road work we were doing, would cost over what it would cost if done with a steam shovel was to be charged—distributed amongst locomotives and cars, which I done. When the monthly expenses came in for labor and material, in my own handwriting, I made a lead pencil distribution, a certain percentage to passenger engines, a certain percentage to freight 4949 engines and freight cars, the distribution clerk exposed it.

Mr. Dodridge was the inventor of the road device. I was building them at his request, and on orders from the Superintendent of Machinery. Mr. Warner wanted the work done with the steam shovel—reducing the grade line. Mr. Warner told me that I did that under instructions from Mr. Dodridge, and I told Mr. Warner I did not, and he discharged me, as he stated, for lying.

Q. Mr. Warner was the Auditor wasn't he.

A. Mr. Warner was the General Auditor and Vice President, I think.

Q. That was brought about as to whether you did it through instructions or whatever way you did it, because the Auditing Department wanted it distributed properly?

A. No, sir, the Auditing Department didn't approve of that and wanted every item of expense charged to the proper account.

Q. Where it properly belonged?

A. Yes, sir.

Q. And it was a question of disregarding that of which they complained?

A. Yes, sir.

Q. And you replied that you dis-regarded that because of the orders of your immediate superior?

A. I was instructed by my immediate superior, but Mr. Warner thought Mr. Dodridge instructed me to do it, but it was not.

I have letters right in the office, or did have, asking for 4950 increased clerical help, and I would get a letter from the Superintendent of Machinery's office, "Increase your number of car cleaners or inspectors."

I suppose they have reformed all over the Iron Mountain railroad today, and I don't suppose anything of that kind exists.

Redirect examination.

By Mr. SMITH:

Q. If I understood you correctly about the matter of your discharge that Mr. Moore brought up, they were after Mr. Dodridge, and thought he was the man that had given you those orders when he had not?

A. No, sir, Mr. Warner told me Mr. Dodridge gave me the orders.

Q. And you could not convince him that you did not get them from Mr. Dodridge?

A. No, sir, and I wouldn't tell him who did give them to me.

Q. You took as an illustration of another matter that you referred to in your testimony of padding of equipment accounts on the Illinois Central, as I understood your testimony on that, you regarded Mr. Harahan as being of the same high character as Mr. Carl Gray?

A. I looked upon Mr. Harahan as a man of as high up-right character as any man on earth.

Q. And you don't think Mr. Harahan would have permitted the padding of car accounts for a moment?

4951 A. No, sir.

Q. And you don't think Mr. Gray would?

A. No, sir.

Q. If Mr. Harahan received his car reports, including these padded reports, he would naturally form his opinion that these were the cost of maintaining that equipment?

A. Yes, sir.

Q. So if the General Manager of this road would receive your reports, if the Auditor had not checked them, he would have received the impression that this was the cost of maintenance?

A. Yes, sir.

Q. That is the way I understood your testimony, that the General Manager did not know the details of the cost of maintenance?

A. That is the information I wanted to convey.

Q. Mr. Moore had you to put in a beautiful picture here in the record of a triple valve, a very complicated and beautiful piece of machinery, according to this picture. I find on the opposite page in the book this was taken from, as the cost of this triple valve, as shown on the catalogue from which it is taken, to be \$20.00. This beautiful piece of mechanism composed of 34 parts costs \$20.00?

A. Yes, sir.

4952 Q. Now there was 122 parts of the air brake that you and Mr. Rosing agreed was correct, and I will not take up the details of them, but I want to call your attention to some of the parts that are shown in this beautiful picture. They run from one cent to \$8.00, several of them are one cent, two cents, five cents, and so forth, is that a fair illustration of the cost of this air brake?

A. Yes, sir, the total cost of the freight car equipped was \$30.00— isn't that right Mr. Rosing?

Mr. ROSING: The cost of the brake on the car is about \$90.00.

WITNESS: It wasn't that years ago.

Mr. ROSING: To put on the brakes, you had to put on metal beams?

WITNESS: \$40.00 a car is what we used to pay for it.

Mr. ROSING: Just the air brake part costs \$40.00.

Mr. HILL:

Q. All these 122 parts cost you \$40.00?

A. Yes, sir, that is why I made the reference to the switch rope.

Q. What was that switch rope?

A. That was the rope that was carried in the caboose for re-railing the cars,—a big manila rope 3½ inches in diameter, with a hook in one end.

And the same way with the car chains, a caboose that went out without four or five car chains, the conductor was discharged if he had to set a car out because he didn't have chains enough to keep it going, these car chains are made up of 75 links I guess. If you want to delude some person with these figures, might I consider this as reasonable to bring in the switch rope we used to use and the car chains that they don't have to use now.

Q. This is very serious here, some of these 122 parts actually cost one cent and others, quite a number of them—does this imposing array of one cent parts and two cent parts and \$1.50 parts, all amounting to 122 parts, costing \$40.00, after your attention is called to it, change your opinion in the least as to what you have heretofore expressed about the effect of this air brake as compared with the hand brake?

A. No, sir, I had all of these parts in view.

Q. You had all of these things in view when you gave your testimony?

A. Yes, sir.

Recross-examination.

By Mr. MOORE:

Q. How many cars were in freight service on the Iron Mountain road when you were Master Mechanic?

A. I can tell you tomorrow morning.

Q. Just tell it as near as you can.

A. I cannot tell you how many locomotives we had, but I have got all of that at home.

Q. There were thousands of them?

A. Yes, sir.

4954 Q. And one of these devices was on all of those cars?
A. All air cars—all were not equipped when I left the service.

Q. They probably are by this time?

A. Yes, sir, if they are in inter-state service they have to be.

Q. If there were from forty to fifty thousand cars, each one of them would have those devices?

A. Yes, sir.

Q. And although it might not amount to but little in detail, it would amount to a great deal in the aggregate?

A. Yes, sir, these safety appliances and power brakes were an enormous expense to the railroads.

Redirect examination.

By Mr. HILL:

Q. You mean it was an enormous expense to install them?

A. Yes, sir.

Q. But the up-keep is less?

A. Yes, sir, it makes all contributory damages as a result of the methods that those things remove, very materially reducing not only personal injuries but everything else as well.

Witness excused.

Adjournment 7:10 P. M.

4955 K. P. ALEXANDER, being duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. K. P. Alexander, age 46, Division Sales Agent, McAlester Fuel Company.

Q. Your present residence is Little Rock?

A. Yes, sir.

Q. Mr. Alexander, you have had long and varied experience in railroad work, I wish you would give a little biography, for the benefit of the record in this case, of your services with railroad companies.

A. Do you want it as specific as Mr. Roberts gave you?

Q. If you can recall it all?

A. I have notes in my desk showing service in different capacities—

By Mr. MOORE: He can state it, and if I want to cross-examine him on it I can do it.

By Mr. HILL:

Q. Just speak generally without being specific as to dates.

A. I was a machinist about ten years, part of the time with the Missouri Pacific—machinist at St. Louis, Mo. Later I was with the Frisco as machinist and Division Foreman at Newberg, Mo., and at Fort Smith, Arkansas, about fifteen years.

4956 I was then Master Mechanic for the Fort Smith & Western Railroad Company in charge of all power and equipment, at Fort Smith, Arkansas,—office at Fort Smith, Arkansas, for the period of two years.

And in 1904, I went into the coal business, and since this time I have remained in the coal business.

Q. Your railroad service then terminated in 1904?

A. Yes, sir.

Q. I will state in this connection, that our case is made up as to the conditions of 1907 on railroads, and in asking questions, I may say now, in contrasting the former period with the present time, but I mean to say 1907.

You heard the questions as put to Mr. Roberts about starting and stopping and switching?

A. Yes, sir.

Q. I will repeat the question in shorter form. The State has used exhibits in this case showing tables prepared by Welling, an authority on railroad operation, in which he gives the distribution of the cost of freight car repairs as 21½% in starting and stopping, and 13½% in switching.

The railroad witnesses in rebuttal have recognized Welling as an authority on that question, but claim his tables were prepared while the link and pin couplers and hand brakes were used, and before the automatic couplers and air brakes, and that owing to the change in equipment, the percentage should be largely increased.

Assume for the purpose of the question that the Welling-4957 ton percentages were correct of his date,—and it is a fact that these percentages would compare with the statistics made up during the time the hand brake and link and pin coupler were in use,—assuming that is a correct percentage under that method of railroad operation, I would like to have your opinion as to what change, if any, should be made now?

A. 1907?

Q. Yes, sir.

A. From my observation and practical experience, I would say that the percentage should then be somewhat less, for the reason that all power and equipment was, during that time, and has previously been made much more substantial than it was during the time of the link and pin couplers, and during the time of the hand brake—all parts being strengthened to take care of the additional weights and additional lengths of trains and the heavier equipment, and I believe that the percentage would be possible one-half of the percentage of the link and pin percentage.

Q. You mean on both of these propositions, taking starting and stopping?—Assume 21½% under the old method, what percent would you give that under the new—in 1907?

A. I think 15% would have covered it.

Q. Well, on the switching, assuming that 13½% was correct under the old method?

A. I should think it should be reduced possibly 20%, for 4958 the reason that the damage to switching now is not as great as it used to be.

Q. You would leave that at about ten in round figures?

A. Yes, for the difference in the rigging and the other appliances

that are used, the damage couldn't be as great now as under the old method of car construction and locomotive construction.

Q. Mr. Alexander, the State's accountants have used $2\frac{1}{2}$ times for locomotives as against freight cars, in ascertaining the cost of maintenance of way on the per mile run basis—in other words, assuming that the engine in running forty miles would do as much damage as the freight car in running one hundred miles. I read here in your presence from the testimony by Mr. Gray in which that is attacked, I wish you would give your opinion upon that proposition, based upon experience and observation, as to the comparative injury to the way by locomotive contrasted to the freight car,—by that I mean taking the average conditions, year in and year out, season in and season out, big cars and little cars—I am trying to get at a general average condition?

A. Going into it I will have to go into it in a little detail, in order to make clear what my meaning is.—The damage by a large furniture car would be greater than by locomotives,—the weight of the locomotives is upon a very much greater number of wheels distributed over a greater length of track surface than on any other car, having four wheels, or four wheel trucks, so that there 4959 is a greater amount of weight on the track under a heavily loaded furniture car than there is under the same length of track on any locomotive. Further, locomotives are always so constructed by the use of springs and equalizers and other devices as to nearly compensate for all the shocks or irregularities of the track, more than has been found profitable to use in constructing freight cars. It is true that not quite as much attention is paid to flat wheels on cars, which of course injure the track, same as a flat wheel on locomotives, the tires on locomotives, both the tread and on the flange, are watched by all Master Mechanics and engineers much more closely than it is possible to watch the tires and tread of wheels under cars. It is true that in the early days, not as much attention was given to the correct counter-balancing of locomotive driving wheels as was done in 1907.

Q. Mr. Alexander, I wish you would explain that in detail, some of the other witnesses have explained it, but as far as I have been able to gather, I have not quite understood it, I wish you would explain that from a technical standpoint?

A. So that the layman would understand it is what you desire?

Q. We have to try this case before Judges who know more about it than we do, but still we would like for you to explain it so the laymen would understand it, as far as we are concerned.

4960 A. In locomotive construction, there is what is known as the angularity of the main rod, which is considerable greater in short main rods than in long rods, and on account of the main in short main rods than in long main rods, and on account of the main rods and the side rods, certain counter balancing must be done to the driver wheels—the locomotive driving wheels.

The counter-balancing of the locomotive driving wheels was not very scientifically done until within the past six or eight years, but since then, by numerous experiments that have been made, the in-

correct systems of balancing have been almost wholly overcome. The effect of the incorrect balancing was—when the locomotives ran at a high rate of speed, it caused them to pound on the rail at each revolution which injured the track.

That pounding of course, was never true with reference to car wheels, and all locomotives are now supposed to be so constructed that this pounding effect no longer exists.

Q. Was that the condition in 1907,—you say now?

A. When I say now, I mean 1907 in all my testimony.

Q. Now I probably broke into your *tread* of reasons—I wish you would state further—

A. I would state further with reference to the pounding effect, what used to be true with reference to locomotives, that effect wasn't so great from local freight engines as from through freight engines, for the reason that the local engines, as a rule, run at a lower rate of speed than the through freights or fast freights, therefore the 4961 local engines would produce less damage to the track from improper counter-balancing, flat wheels, etc., than the through freight engines.

Q. Now taking it as a general proposition, applying the extremes on each side, taking an ordinary locomotive and an ordinary car, equalize the extremes, I wish you would give your best estimate of the proportional damage per mile, regarding the locomotive as one unite and the car as the other unite?

A. Basing the estimate upon the average of both?

Q. Yes, sir. Now in freight service I am speaking of.

A. Now in freight service, the only estimate I could give would be simply my judgment from observation.

Q. That is all we can ask you.

A. And merely as a guess, and from my observation, I should imagine that the $2\frac{1}{2}$ —that is it isn't it—

Q. Yes, $2\frac{1}{2}$ times has been allowed, assuming the engine would run 40 miles and the freight car running 100 miles.

A. I would say two to one would be nearer fair.

Q. There is one other question, going back to the starting and stopping proposition. Mr. Alexander, are you familiar at all with the Union Pacific Railroad?

A. No, sir.

Q. Are you familiar with the transition taking place in 1904—from the old line of equipment to the new—I understood that was the transition period, along in there is when it occurred wasn't it?

A. Yes, sir, there were a great many changes made along then and since that time, as well as previous to that time.

Q. Are you familiar with the order of these changes—the safety appliance that has been added, the automatic couplers and so on, since 1904 up to 1907?

A. It is my recollection that all the equipment had automatic couplers by 1907.

Q. Mr. Alexander, assuming that cars were not equipped completely with automatic couplers and various other safety devices pre-

scribed by the Act of Congress, in 1904, but that the equipment was completed by 1907. I will ask you what would be the effect on the car damaged, say there was a table made up in 1904, the figures running back for three or four years prior to that time, would the percentage allowed in such a table still obtain in 1907?

A. On what class did you refer?

Q. I am referring to these starting and stopping, and the terminal handling and switching? The percentage of repairs or maintenance of repairs due to starting and stopping,—maintenance for equipment in starting and stopping—this table was probably made up in 1904 based upon experiments made for three or four years prior thereto, and a certain percentage given—say 16% for switching and 20% to starting and stopping, or, any other per cent—I want to get 4963 at a comparison, I say for the year 1904 would be this per cent, now for the same item in 1907 what would it be?

A. The percentage should be less, materially less than for 1904. I state that for the reason that all parts of cars that experience had shown to be weak, have been strengthened.

Q. Taking experiments based on three or four years prior to 1904, you would know there would be link and pin cars and hand brakes in the test made during these years?

A. There would be, almost exclusively so.

Q. Now Mr. Alexander, speaking from the shop standpoint and the repair standpoint of locomotives, taking the miles run, what locomotive has the most repairs, that hauling local freight or that hauling through freight?

A. In order to answer that question, it is necessary to explain, that as a rule on all, I think likely on all railroads, the best class of engines, and engines in the best repair are put on what is called the preferred runs,—or the through freight service, and after they have made considerable mileage, and they are a little bit run down in repairs, they are frequently put in local service, where they could get practically as good service as they would get from a newly overhauled engine, for after they have had a year or more service in through freight service, then the repair bill per mile run 4964 would be increased. So for that reason, it is not at all unlikely that the repair cost per mile run for local service would on that account show higher than the repair cost per mile run for engines in through freight service.

Q. That would be due, if I understand you, from the fact that it had deteriorated in through freight service and was dumped off on the local service?

A. Yes, sir.

Q. And for that reason much of this repair—the cost of the repairs should be attributed to its work in through service, and not take it as repairs done while in local service?

A. Yes, sir.

Q. Now here is another question right along that line, that is as to the engine house service. The State has assumed that the through freight locomotive gets no more Round House service per trip to the Round House, than the local freight locomotive. What is your

understanding—they have made allowances for extra trips—what I mean is the service per trip, wiping, knocking fires, and various other things the engines receive when they go into the round house?

A. Engines in local freight service invariably come in in the evenings and leave early—at seven o'clock the next morning, and the only repairs they get are of the emergency character,—repairs that must be made in order for the engine to make a successful trip to the other terminal, they are usually not wiped up, they get some attention, as far as the boiler wiping is concerned, they hardly ever give that, the hostler inspects the coal, and water and sand, looks after that, and it is possible that such machinist work as may be necessary to be done, and in that it may cost slightly more for the reason it is done at nights, that would be true only in such round houses as did not have regular men who would be paid the same rate for night work as the day men were paid for day work, so I doubt if there would be any additional expense per trip to a local engine then to the through freight engine, and I believe the expense per trip would be less, at least, that has been my observation.

Q. At any rate, you don't regard it as any injustice to put it on equality with the through traffic?

A. No, sir. And as before stated, the local engines having been partially worn out in through freight service and probably on that account they were probably require greater expense than the through engines would.

Q. That is getting into another account,—these accounts are made up according to the Inter-state Commerce Commission classification, and each account stands to itself. I understand this engine house is a stable you put your engine in. These other repairs come under the head we discussed awhile ago.

Now on the passenger side of the proposition, the situation in this case calls for the separation upon some base of the mail and express expense from that of the passenger, and after that is separated from the passenger business, then to ascertain the expense to be properly apportioned to State and inter-state passenger service, and in this case the car mile basis has been used, which, of course would be on the various equipment, on the mail, express and coaches, exclusive of the Pullman, that is taken care of by the Pullman Company, in another account.

They have been criticized on the ground they have done injustice to the mail and express in treating it on an equality—the expense as to the car mileage. I wish you would give your opinion as to the cost of repairs of the various kinds of equipment, mail cars, express cars, baggage cars and coaches, and then give us your opinion as to the apportion that should be made—taking the express and mail on one side and the coach and baggage on the other.

A. What expense do you want to figure in this?

Q. Car repairs.

A. Not painting and varnishing?

Q. I presume that is repairs under the classification that should be included.

A. Everything that is done to the car in the shop—now I

would state that is all pooled on the Iron Mountain and Missouri Pacific System—

Q. Now not taking the figures derived from the pool, but upon car mileage basis, per mile run, separating the express and 4967 mail from the coach and baggage, what is your opinion on that, that is what I am asking.

A. Covering the matter, what we generally call car repairs, I should think the greatest expense would be on the car nearest the locomotive, on account of it having to absorb the shock of all the loads or cars behind it, which would mean that there would be less damage to the coaches than there would be on the baggage cars or mail cars. Very little cleaning at terminals is done to the mail car, express car and baggage car—

Q. Cleaning, Mr. Alexander, goes in another account, that is not the car repairs, that goes into the transportation account, that doesn't go into the car repair account, so you can exclude that from your consideration.

A. Then you want just the car repairs, everything pertaining to repairs?

Q. Yes, sir.

A. I have no figures, never kept any figures on that point, and from my experience, I doubt if it is usually done, and I would hardly know how to estimate it.

Q. Which goes into the shop more often, the car next the engine or the coach?

A. The car nearest the engine, it would go into the shop oftener, for the reason it would receive all the shock of the entire train, and the gases of the coal burning in the engine, and the cinders, 4968 would damage the roof more quickly than it would do further back in the train, but I presume there would be some compensating elements on the other side, about painting, varnishing, putting in glass, and so on, in the coach.

Q. Taking it by large and by small—the general average condition, what would you say, what would you say as to the division of the car repairs, the mail and express on one side and the coach and baggage on the other—the damage to the baggage and coach as against the mail and express, what would you say as to the repairs?

A. Well the coaches are very much longer than the baggage or express cars, and the mail cars are usually also longer, which would require more painting and more varnish than for the shorter cars—the question is a little bit ambiguous.

Q. I will make myself clearer, the question is to separate and get the mail and express expense out of the passenger expense, and they have used the car mile basis and apportioned that expense, taking the mail and express on the one side and the baggage and coach and everything in passenger traffic from the other side—I understand your testimony is, the greatest injury to the cars would be to those toward the front—that is to starting and stopping and to paint and varnish?

A. Yes, sir.

4969 Q. On the other hand there would probably be more injury to the interior of the coach, the glass, upholstering, of the coach and things of that kind?

A. I think so.

Q. The question is this, treating them alike, has any injustice been done to either traffic,—treating them alike on the car mile run?

A. I haven't ever kept any data on that, it is a very difficult question to answer, but then from my observation, I should imagine that it would be about fair.

Q. The coach would likely get more repairs, but wouldn't get into the shop as often? That would probably be about the situation?

A. Yes, sir.

4970 K. P. ALEXANDER, re-called for cross-examination, testified as follows:

By Mr. MOORE:

Q. Mr. Alexander, when were you in the machine shops of the Missouri-Pacific at St. Louis?

A. About 1881 or 1882.

Q. How long were you there?

A. About a year.

Q. What capacity were you working in then?

A. Machinist.

Q. What department were you working in?

A. Machinery shop—back shop.

Q. How old were you at that time Mr. Alexander?

A. I was born in 1865—about sixteen, somewhere about that.

Q. You were learning, in other words?

A. Yes, sir, I was just a young fellow.

Q. Then after that you went with the Frisco—some years after that as machinist and Division Foreman at Newberg—where is Newberg?

A. That is the first division point southwest of St. Louis on the Frisco.

Q. How long were you there?

A. About twelve years.

Q. When were you Master Mechanic on the Fort Smith & Western?

A. Do you want the years?

4971 Q. Just about—as near as you can recall, I don't care about being exact as to the year—as near as you can recall?

A. About 1902 and 1903, I think.

Q. Where is the Fort Smith & Western? Where does it run?

A. It runs from Fort Smith, Arkansas, and at that time to Guthrie, Oklahoma.

Q. How long had that road been in operation then, Mr. Alexander?

A. Since about 1902 or 1901.

Q. Did it have a large equipment when you went there?

A. Not when I first began, but when I left there it had about 14 locomotives and 1200 cars, possibly more cars than that.

Q. It was still in its modest state then?

A. I equipped the Mechanical Department there.

Q. You quit there in 1904?

A. Yes, sir.

Q. Did you quit railroad service then?

A. Yes, sir.

Q. What is the weight and capacity of a large furniture car?

A. A great many of them are 80,000 capacity, and some a hundred thousand capacity, just what their weight is I don't remember.

Q. It requires a pretty large car to carry one hundred thousand pounds of furniture?

4972 A. All cars are built to carry ten per cent over their stenciled capacity.

Q. You spoke yesterday about a furniture car, I suppose you mean it was of the class of cars constructed for the purpose of carrying furniture—furniture cars are usually longer—Mr. Roberts who testified in this case yesterday, said that 60,000 was about the maximum capacity, and weight 40,000.—

A. I am not prepared to say what the weight of a car is or was. I have not retained that in my recollection—but the capacity on furniture cars run up from 80,000 to 100,000 pounds, for instance, coal cars as now built carry 80,000 to 100,000 pounds capacity.

Q. I understand that coal cars are now built to carry 80,000 to 100,000, but it would require a very much larger car to transport 100,000 pounds of furniture than it would 100,000 pounds of coal?

A. Yes, sir.

Q. Aren't you mistaken in the statement if you intended to make that statement, that furniture cars have a capacity in carrying furniture of from 80,000 to 100,000 pounds?

A. Yes, sir, it is possible I am, because for the fact furniture is lighter lading.

Q. What is the weight of the heavy engines that are now in use?

4973 A. I am not prepared to give the weights on the engines, I have not kept these things in mind.

Q. You wouldn't be prepared to make a comparison?

A. I will state this, during the past six years I have been entirely out of the mechanical business. I have been trying to forget it as much as possible in order to concentrate myself more on my present business, and I am not as well prepared to give detail information on weights and dimensions and things of that character as Mr. Roberts, for during the time he has been out of railroad business, has been doing semi-mechanical work, as he has had the supervision of engines and boilers on steamboats—

Q. So you don't feel as competent to take up these matters as Mr. Roberts?

A. No, sir, not as far as weights and dimensions etc. are concerned.

Q. I use the word "now," I suppose you understand I mean 1907?

A. Yes, sir, I understand that in all cases you mean 1907.

Q. You are not familiar then with the changes in appliances used in operating railroad cars that have been made since 1904 to 1907?

A. Well, as a matter of fact, I think there were very few changes made in 1904 to 1907 that I have not observed. I will say further on that question, there has been some changes in the air brake apparatus that have been made since 1904 that I would not 4974 be thoroughly acquainted with now.

Redirect examination.

Agreement.

Q. It is shown here by the witness from the Interstate Commerce Reports for the year ending June 30, 1904, that over 90% of the equipment had been supplied with air brakes and automatic couplers.

By Mr. HILL:

Q. Mr. Alexander, on this furniture car that Mr. Moore cross-examined you about, wasn't what is called a furniture car—a car that is constructed to hold furniture but also constructed to hold any other commodity?

A. Yes, sir.

Q. And would have a capacity much larger for other commodities than it would have for furniture, isn't that a fact?

A. I think that is correct.

Q. Suppose you take a furniture car and load it with pig iron, it would have a carrying capacity for pig iron very much 4975 more than it would have for furniture?

A. Greater in pounds.

Q. That is what I mean. Do you have any recollection of the capacities by the Western Classification of the various commodities, or did that come in your line?

A. No, I have no recollection of the weights of the different class of cars, I can get it—I have it in my office.

Q. Do you remember about what a furniture car was—I understand it is about 14,000?

A. I don't remember.

Recross-examination.

By Mr. MOORE:

Q. A car built for carrying furniture, used for carrying furniture—different character of freight, is it used for carrying pig iron, rock and coal and things of that kind?

A. I think there are usually stenciled instructions on the side of the furniture cars prohibiting their use for certain purposes. I am also of the opinion, that in some instances they are stenciled to the effect that they are to be used for furniture only.

Witness excused.

4976 J. A. SIMMONS, being first duly sworn and examined, testified as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and present occupation?

A. Age 55, Ft. Smith, Ark., sand business.

Q. You have had a great many years of railroad experience, I wish you would give a little biography of your railroad experience, commencing at the beginning without going into great detail, and give generally the different service that you have performed in railroad work?

A. I commenced on the Missouri Pacific the 1st day of October, 1896, as track layer at Selina, Kansas; I wasn't there but a short time, and went back to Texas and then came back, and went to work as section foreman at Gypsum City, Kansas.

From there, I was transferred to Ft. Scott, Kansas, as section and yard foreman. From there, I was transferred to Joplin, Webb

City, Carthage, laying track for the mines.
4977 From there, I was transferred to St. Louis, overhauling the yards, putting in new yards from Cabanne Avenue to 700 feet east of Ewing Avenue.

From there, I was transferred to the Arkansas Division, headquarters at Walnut Ridge, as assistant Roadmaster; remained there four years.

The 1st day of July, 1898, I was transferred to Van Buren as Division Roadmaster of the K. & A. V. Division—had it for a time from Little Rock to Coffeyville, a short time; remained there 8 years, was transferred from there the 1st day of July, 1906, to Ferriday, Louisiana, as Division Engineer. Had charge of seven divisions down there.

Q. That on the Iron Mountain in Louisiana?

A. Yes, sir, remained there a year and quit railroading, the 16th day of June, 1907.

Q. The period that we are inquiring about in this case is conditions in 1907; that was the time you quit railroading?

A. Yes, sir.

Q. Have you, in your experience, observation, studied the relative wear on the track and roadbed, made by locomotives and by freight cars?

A. Yes, sir.

Q. Has your duties in the lines you have above described made it necessary for you to study those conditions?

4978 A. Yes, sir, that was part of my business.

Q. I wish you would state your opinion, based upon your experience, and observation, as to the relative wear on the road, take the whole way, by freight cars and locomotives?

A. Well, I think that a hundred thousand capacity coal car, loaded to its limit, is harder on the track than an ordinary locomotive; for the simple fact that the car hasn't but two bearings, two trucks, and they get the full force of that car on the track at

one end of the car—for instance, a low joint, that car will go into a low joint more severe than an engine will. An engine has a pin through the pilot trucks that lets the engine work up and down, and it doesn't put the full weight of the engine on the track, in any one place.

Q. How about bridges?

A. On the bridges, I think that the cars are more severe on a bridge; I don't mean to say on a bridge but against a bridge; there is but few bridges but what is higher than the track approaching it; letting the cars and engine hit against the bridge, as well as on it, and my opinion is that the cars hit a more severe blow to the track or a bridge, than an engine does.

Q. How about the frogs?

A. Well, frogs in my estimation, is the weak spot on 4979 track; they are short as a rule, some only four feet long, and some of them 16 to 20 feet long, and there is four connections to that frog instead of two, to the track, giving it a chance to vibrate more or less than a rail.

Q. What is the effect of a very large locomotive and very large freight car on the frogs?

A. Well, you take a locomotive with a worn driver, and they soon wear out the wing of a frog, as well as the point; those worn tires are more on switching engines than they are on road engines.

They use sand on switch engines more than they do on road engines, because they are not connected up with air; switching the cars away from them all the time, and the frog has to be renewed very frequently. Very frequently we make a new wing and put on the frog points; that could be done with what we call a jim crow or rail bender, and the drill; a good foreman can make a wing of a frog and put it on—I have put them on myself.

Q. What is the effect of the average car on a frog?

A. Well, the car, I think it would come pretty near in line with a frog as it does with a bridge; it would have more effect on the frog, after the frog is worn some, than an engine does, because it is going down in there with a chug of the wheel.

4980 Q. Where do you find flat wheels oftenest. I don't mean the number of cars, but relatively, one car and one engine?

A. Yes, we very frequently find a flat wheel on a car and on an engine too.

Q. Proportionately, which do you find the flat wheel in the oftenest; the car wheel or the engine?

A. I believe I have observed the cars the most.

Q. What is the effect of a flat wheel on the track?

A. It is very detrimental on the track, on account of its pounding; it comes around and strikes the rail similar to a trip hammer; that flat base hitting the rail injures the rail, and of course, to a certain extent, injures the car.

Q. What would be the effect of a flat wheel on a low joint?

A. Very detrimental, if it should happen to hit there; if a flat base should hit a low joint, it would be very detrimental; otherwise, it would be the same as any other wheel.

Q. Now, there frequently happens, as I understand, in the loading of cars, brings down the side bearings—what effect does that have on the track? What I mean, it brings the car down on the side bearings?

A. I understand what you mean; a car that is not properly loaded, the car being more loaded in one end, for instance, 4981 than in the other, or is overloaded, weights the car down on the side bearings, and makes that car—especially going around a curve, hug the outside rail more so than it would if it was loaded properly, and is detrimental to the track, and where there is bad ties it—I have known of instances where it would turn the rail over. I don't mean to say, turn it entirely over, but turn it out on the outside rail, sufficient to let the wheel on the opposite side of the car drop on the inside of the inside rail. When it would drop down there, then the wheel on the outside rail would pass over the top, and cause a derailment; I have known that to happen frequently, especially in yards.

Q. You commenced in giving your biography of your service, with the Missouri-Pacific and Iron Mountain in 1886?

A. Yes, sir.

Q. Prior to that time had you had railroad experience in what line—without going into the detail; state generally what kind of service you had with any other railroads?

A. When I was quite a lad, I had service as a watchman on the Mattoon & Gravia, building that railroad, and then I was on the Santa Fe.

Q. In what capacity?

4982 A. I was on the Santa Fe under L. W. Lewis and Barney Langtre, contractors, in the construction department; I had a gang sinking pits for abutments for bridges; from that, I went into the water service on the Santa Fe; I was in the water service, I believe, about five years, from Kansas City to Dodge City Kansas. I had a gang there, I think I was there about 4 or 5 years; I don't remember just exactly.

Q. What other service; I just want to get your experience without going into the details of it, up to the time you went with the Iron Mountain and Missouri Pacific?

A. That was about all.

Q. Are you familiar with the operations of trains in the olden times, we might call it now, when they used hand brakes and link and pin couplers?

A. Yes, sir.

Q. Are you familiar with the operations of trains with the automatic brakes and air?

A. Yes, sir.

Q. Equipment that has been installed in them in recent years?

A. Yes, sir. Understand me though—I am not a practical man at handling that air, but I have been with the trains and train crews for twelve years continuous—for 13 years continuous.

4983 Q. And your work as roadmaster and in various other capacities, you have practically lived on the trains and with the trains?

A. I was on the road continuously.

Q. Are you familiar with the injury that is caused to cars by starting and stopping?

A. Well, I have seen a great deal of it.

Q. Are you familiar with the injuries that are caused to cars by switching?

A. Yes, sir, saw a great deal of damage done.

Q. We have a question in this case, that I will state to you. We have prepared exhibits using a percentage that was obtained in the days of the link and pin coupler and the hand brakes, the percentage was 20½% for damage done to freight cars from stopping and starting; that is from all damage done to freight cars, that it costs the road to maintain them—20½ per cent was added to that cost, to cover stopping and starting.

A. That is the old link and pin—

Q. That old table was made up in that link and pin day, and hand brake day, 30 years ago, something like that; the question I want your opinion upon, assume that that 20½% was correct—assume that it would be a correct percentage of those days, I will ask you the effect of the change to the modern equipment, whether it would be more or less injury to the cars, from starting and 4984 stopping under the modern equipment than under the old?

A. My judgment is that if it was 20% or 21% with the old hand brake, 9 or 10% would catch it now.

Q. You would cut it in two and a little more?

A. Yes, sir.

Q. What are your reasons for that?

A. Well, take the old link and pin, take the different size cars, let a high car come back against a low car, it would go on top or in other words, the link, if it was in the standing car, would go under the draw bar, of the high car, and have a tendency to raise that draw bar up; that would be injurious to the dead wood, and vice versa, it would be injurious to the draft timbers.

Q. How about the effect of the air applied through the train, as compared with the force set by hand brakes, what effect would that have on the stopping?

A. Well, the train set by air is stopped more uniformly than it is by link and pin; a link and pin, the brakeman got out and set three or four cars—four or five, such matter, and the engine does the rest of the stopping, of course that would have a certain tendency of jamming the cars together.

Q. You said the link and pin, I think you mean the hand brake, in referring to stopping?

A. No, sir, just explaining on the link and pin, they would 4985 set four or five cars with the brake; the engine would do the rest; that would be detrimental to a certain extent, with the car.

Q. In your work as roadmaster, have you discovered the effect of the injury to cars, as evidenced by scraps on your road, as a result of the stopping and starting movement?

A. Yes, sir, it was part of the roadmaster's business to help repair cars; that is, have the foreman help repair them; they would send a man out from headquarters to put in a draw bar, repair a car that was off the center, it would be our duty to assist that car repairer to that extent, and when I took charge of the K. & A. V., the 1st of July, 1898, they were just gathering up the scrap for that month or had just gathered it up; Mr. McCloud, the man I succeeded and I remember very distinctly, he had two cars and Mr. McKey, the superintendent, told me——

Q. Don't repeat what he said; that wouldn't be competent.

A. I had to separate that scrap, take the car scrap and put it in one car, and the track scrap and put it in another, and it was forwarded then to the purchasing agent at St. Louis, and when I went to handling that myself, I sent out two cars, one for the car scrap and one for the track scrap, saving the trouble of transferring it and assorting it, and very frequently, we would get two and 4986 sometimes more cars of scrap on the 166 miles of track. We

later on had the section foreman to bring the draw bars especially from the cars that were set out, would be taken in chained up—we had the section foreman to take the draw bars to the depot and the agent would bill those draw bars to the master mechanic at our headquarters at Van Buren, to be used again in the cars.

After we got the standard coupler and air, I don't suppose that there is a full car in three months on the division.

The section foreman takes that to the tool house, and we have a little landing made to throw that on, and the local stops and they throw that on and bring it to headquarters.

Q. Now, take the switching side of that proposition, you testified you were familiar with the injury to cars occasioned by switching; it is assumed in this case that 13½% per cent of all the injuries due to freight cars in the old link and pin, hand brake days, would be due to the use of cars in switching; assume that that is a true percentage, of those days, what should be the percentage now; I don't care so much about the percentage as a comparison—would it be more or less with the modern equipment?

A. It would be less.

4987 Q. In your judgment, how much less?

A. You say that is 13%?

Q. 13½% was the old percentage, I think.

A. I don't think it would go over 5 or 6%.

Q. It is in testimony here by some general managers, that it is and feasible or practicable to make any estimate or intelligible estimate or fairly accurate estimate of the switching that is done by a local on the run; I wish you would state whether in your opinion, any one thoroughly familiar with the run of a local freight train could make a fairly accurate estimate of the number of miles that that local freight engine would switch in its run—I don't mean in any one day, or two days, but general average conditions?

A. I don't see how they could get at it accurately, but I believe it could be shown up approximately what extra running they would do at each station, provided they stopped daily at each station.

Q. Illustrate that, state how you would get at it—take any division that you are familiar with—state your method of getting a fairly accurate approximation of the amount of switching that would usually be done by a local locomotive?

I hand you a work sheet of Mr. Wright that has been used in this case, that gives the various divisions, and I hand you the sheet that shows the Central Division, Van Buren to Russellville, that I know you are familiar.

4988 A. Now take Shibley, and start with Shibley; that has a 3,500 foot passing track, and from that passing track is a spur, a fruit spur; that business is all done, virtually all done by the train going to Van Buren, taking the load there. I presume that it is 2,500 feet from the head block of the spur to the north end of the passing track; they stop their train at the south end of the passing track, or pull their train in on the passing track, then pick up their car off of the spur, put it into their train, and pass out of the north end of the passing track.

Q. In making that movement, how much mileage would they make at that place?

A. They would not make over a thousand feet at this point.

Q. Take another point there to illustrate your idea, about how you would get at the switching?

A. Let's take Mulberry—Mulberry has a long passing track; invariably, the train south bound does the work at Mulberry; they have a house track takes off from that passing track, as well as a spur; they pull down to the station and cut their cars that they have to set out, and do their switching there; it is probably 2,000 feet from the head block of the spur to the end of the spur.

Q. What would be the mileage of the switching made in handling a car there?

A. If you had to put a car in there, and take one out, it would just simply double that length; that would be—provided he

4989 went to the end of the spur, they usually don't go to the end, I don't think it is 2,000 feet, but we will let it go at that;

while I laid the track, I don't remember just exactly what it is.

Q. Say that would be 2,000 feet, then the maximum switching he could get, would be that run you have made, and it might be very much less than that because he might not have to run to the end of the track?

A. That would be my opinion about it; I know that is the way they handle it. Now, we will go down to Ozark, and the passing track is on one side of the depot and the house track is on the other side—opposite side. I should judge that the house track is 1,200 feet long—

Q. And how long is the passing track?

A. 3,500 feet; but they don't use the passing track there for switching purposes; now, if he had ten cars in his train, he would stop the caboose at the depot to go back on the house track; he would probably do a thousand feet of running there to get the cars; if he wanted to take a car out and put one in, of course, he would do twice that.

2173

Q. Suppose that at Ozark, taking the illustration—it is a pretty good sized town, how many cars have they marked there that would usually be set out?

A. 2.

Q. Take some place that has more than that, some that 4990 would average three.

A. Cabin Creek has three and Clarksville three.

Q. Take either of those; would the switching movement, the ordinary running of the train, require the three separate switching movements for three cars?

A. No, sir.

Q. How would that be made?

A. If he has three cars to spot in there, he would take hold of the three cars and go in and spot the farthest car from his engine first, pull a hundred feet, spot the next one, pull up 100 feet or whatever distance it might be and spot the next one.

Q. If you would take the mileage made by each of those cars, say three, and calculate it as if you were calculating it as 3 movements to switch one car at a station like Shibley, that would give a great deal more mileage than the engine would really do?

A. Yes, sir.

Q. And in the practice, it is done as you stated, and there would not be that mileage earned for three cars, of three times what it would be to put one car in?

A. No, they put three cars out with the same length of run as they would one.

Q. What is the longest track at a station?

A. I don't know.

Q. Take——

A. Main line stations?

4991 Q. I am not asking you the number of feet of the various tracks there, the passing track, house track and industrial track, but what is the longest track that is used at a station,—I am not asking you in feet,—what kind of tracks do the usual stations have—take Mulberry, how many tracks has it?

A. 3?

Q. What are they?

A. Passing track, spur and house track.

Q. Which is the longest of those three?

A. The passing track invariably, if that is what you want to know.

Q. That is what I wanted to know, what is the longest track at a station?

A. I thought you meant the longest track.

Q. I meant the general proposition,—what is the longest track?

A. The passing track.

Q. If you figured every car that has been switched at a station, as switched the length of the passing track then you would get an excess of switching mileage over the actual facts; in other words, if you were making a calculation as we have called for here, for a car that was set out on the house track at Mulberry, if you figured the run on the passing track, taking the length of the passing track to figure

4992 your mileage, you would have an excess of what the locomotive actually did?

A. Yes, sir, for instance, they run by the south end of the passing track, and go up two-thirds of the way of the *on the* passing track, and do the work and go on through, they wouldn't have gone but about one-third of the switching of that passing track.

Q. Is that the general relation of the tracks,—the passing track is much longer than the others.

A. Yes, sir.

Q. That is at all places the maximum track at a station?

A. Yes, sir, the standard passing track, from here to Coffeyville,—if I remember right, is 3500 feet; I extended every track from Van Buren to Coffeyville and made them standard.

Q. Well, as I understand your criticism of that system there (in the working sheets) it is producing too much mileage made in switching?

A. Yes, sir; you see Cabin Creek, for instance, he is setting out three cars and he goes six trips for them.

Q. And how many should he make?

A. One.

Q. Then he has taken the passing track mileage there too?

A. Yes, sir. Oftentimes it is like this: the local train will go on a passing track, and the engine will go past the head block of the house track; instead of that engine running ahead a thousand feet or such a matter to go in on the house track, they cut off two
4993 or three cars back here to clear and hold onto them, and back those cars in and do their work and all they do is simply go the distance from the length of the head block back to the cars.

Q. That would be much less than the length of the passing track?

A. Yes, sir.

Q. Without pursuing that in detail, you could take—by “you” I mean someone thoroughly familiar with the road—a freight conductor or a man that knows the line thoroughly, and the usual conditions on the line of a local freight, and he could make a fairly accurate estimate of the amount of switching *down* by the local couldn't he?

A. Yes, sir, pretty close; I could go on a local train from here to Van Buren, Poplar Bluff or Hoxie, and get it accurately within a very few feet, by being with the train.

Cross-examination.

By Mr. MOORE:

Q. The amount of switching on different trips, different runs of an engine, are not at all uniform?

A. No, sir.

Q. The conditions vary from day to day?

A. Yes, sir.

4994 Q. Depending upon the conditions of traffic each day?

A. Yes, sir.

Q. That is the traffic that is carried in the local train?

A. Yes sir, it is not alike every day.

Q. And the character of switching necessary to be done in order to take out cars or spot the cars, depends upon the necessities of the occasion, on each performance in that respect, doesn't it?

A. Yes, sir, the agent, whenever a man comes into the station, the agent has a list for him to do, set out cars or pick them up.

Q. You illustrated awhile ago, about spotting three cars; suppose he wanted to take one out; that would produce an entirely different movement?

A. Make that trip in there would be all.

Q. I understand what you mean by spotting a car is pulling it to a certain location?

A. Yes, sir.

Q. You have three cars——

A. Yes, sir.

Q. You want to spot two cars and take an empty out?

A. Yes, sir.

Q. Now, the location of that empty may be such that it will require a different movement and more movements than it would to spot two or three cars.

A. The way that is handled is this; in most cases, not all, 4995 they go in on the passing track,—you say the spur takes off the passing track, and they go in to put an empty in there and take out two loads?

Q. Yes.

A. They will set the empty out on the passing track, and they will reach in and get those two loads, and come out, and reach down here and get the empty——

Q. In order to make that movement, they put the empty on the passing track?

A. Yes, sir, that is, just below the clearance post.

Q. At any rate, they take it to the point where it is left on the passing track and leave it there?

A. Yes, sir.

Q. And then they go on the spur track and get the empty?

A. Yes, sir.

Q. In the movement you have just described, of putting an empty, leaving an empty on the passing track and taking out two loaded cars, you make a movement first—the first movement is to deposit the empty on the passing track; that is correct, isn't it?

A. Provided the train—if the train heads in on the passing track, as they do frequently, then they cut off at the empty car, leave the empty car and the caboose standing on the passing track, into the clear of the spur; they move up 128 feet or 30, whatever it might be, and they move back down there and get that two loads that 4996 is in there on the spur; they are going to take them with them; they pull back on the passing track and reach down and get this empty with those two loads and pull up again, and sit them down where they are taking the two loads from.

Q. So that involves a stop in order to cut off the empty and caboose on the passing track?

A. Yes, sir.

Q. And then it involves the forward movement, for the purpose of clearing the switch, which would put them on the spur track?

A. Yes, sir.

Q. And then the back movement on the spur track to reach to the cars they want to get there?

A. Yes, sir.

Q. And then a forward movement on the spur track and passing track, to get beyond the switch connection?

A. Yes, sir.

Q. And then a backward movement on the passing track to go back to the empty and the caboose?

A. Yes, sir.

Q. How many movements is that?

A. 6.

Q. For two cars?

A. If they handled it that way.

Mr. HILL: Three cars you said.

1997 A. It wouldn't matter how many cars.

Mr. MOORE:

Q. That just simply illustrates how it varies, and suppose they would stop on the passing track instead of the main track, then they would cut off the caboose and empty; they would make the necessary movement to get the empty on the track they wanted to leave it on, say the passing track, what would they do to do that?

A. They would run up here on the main line, cut off where the empty is, take the empty with them; they might have five or six loads ahead of them; cut off the empty and run up on the passing track?

Q. For the purpose of clearing the switch stand?

A. Yes, sir.

Q. Go past that?

A. Back down and set that car in the clear on the passing track, each in on the spur and get those two loads.

Q. What would that involve?

A. Back in.

Q. They have set the empty at the place they wanted to leave it?

A. Yes, sir.

Q. They did that in the backing movement?

A. Yes, sir.

Q. They couldn't back farther, they have to move forward then?

A. Yes, sir.

1998 Q. And clear the switch stand, and then what do they do?

A. Get those two loads.

Q. Then what do they do?

A. Pull forward to clear the switch stand.

Q. Then what?

A. Back up and get the empty.

Q. Then what?

A. Pull up to the switch stand and set it back where they took the two loads out.

Q. And then what?

A. Proceed up to the main line with their train, with the two loads.

Q. How many movements does that involve?

A. 7; now then, that is the actual movements they would have to do in that way; now, they are not going to set out any empty, just simply reach in there and get the loads and set them out.

Q. Where are they when they get up to the station—there on the main track?

A. Yes, sir.

Q. Where are you going to locate the loads they want to take out?

A. On the spur track the same as the other was.

Q. You come in on the main track?

A. Yes, sir, at the station.

4999 Q. Now, the two loads that you want to pick up are on the spur track?

A. Yes, sir.

Q. What is the first movement you make for the purpose of picking up the loads?

A. As a rule, the conductor and two brakemen go to unloading freight.

Q. Leave that part out.

A. Cut the engine off, and go up to the passing track switch.

Q. You do that now to clear the switch stand?

A. Yes, sir.

Q. That is a forward movement?

A. Yes, sir.

Q. Then you clear the switch stand, and back down to the passing track?

A. Back down to the two loads on the spur, and pick up those loads and come out.

Q. Then make the forward movement of clearing the switch stand again?

A. You don't have to make any stop; you clear the switch stand on the passing track.

Q. When you have connected with the two loads, you have to go forward and clear the switch stand and get back on the main track?

A. Yes, sir.

5000 Q. And then you back down to your train?

A. Yes, sir.

Q. Supposed you wanted to put those two cars on the rear end of the train, then what would you do—what would that movement involve?

A. Same thing.

Q. Would it involve a movement of all the cars on the train?

A. Yes, sir.

Q. The entire train would have to go through that movement?

A. Sometimes they do this—you mean behind the caboose?

Q. I mean at the rear end of the train?

A. If it is the rear end of the train, it would be behind the caboose.

Q. Suppose it was immediately in front of the caboose?

A. Then they would handle the whole train; let me explain that a little more fully; perhaps if they had charge of the train and were unloading freight, they would back down and pick up those two cars and bring them up to clear in the passing track, and then they would cut off the caboose and back in and get those two cars and pick up the caboose and go ahead.

Q. These illustrate the ways they could do it under other conditions?

A. Yes, sir.

Q. Suppose those two cars they want to pick up were on the spur track; tell the movements they would make to get them off 5001 the spur track.

A. I have just done that; that is off the spur track what I have been talking about; that spur track leads from the passing track, that is what we have been discussing.

Q. Is there any uniformity as to location of spurs at different stations along the line of road?

A. No, sir, there is not, not on these roads here.

Q. To illustrate the thing I have in my mind, you can tell me whether it is a case that might occur or not, suppose you were going into a station from the east, and you wanted to pick up two cars that are on a spur that makes off from the passing track in a westerly direction, and where the switch stand that connects the spur with the passing track, is at the east end of the spur; you want to pick up two cars on that spur; now your train is headed west; what movement would you make to do it?

A. Pole the car out—they frequently pole the car out, provided the switch is close enough to the passing track.

Mr. HILL:

Q. You had better explain what you mean by "poling"?

A. They pick up lots of them—lots of local engines carry poles with them on the rear end of the tank; I have seen many of them,—a pole three or four inches through and a band around each end, and they put that against the pilot beam; they push those cars 5002 out onto the passing track; they can do that, or in other words, they can reach in and get the car and make a drop of them at the lower end of the passing track.

Q. Tell the movements that would be involved in that?

A. I am wrong about that, about the pilot beam; that wants to be the tank; they cut off their engine at the clearance here; leave room enough from the switch back to their train to receive that car; they move their engine down to where that car is; they put this pole on against that car, and shove that car right back to the train, throw the switch and couple up and go ahead.

Q. Now, in the case that I intended to put, you are resting on the main track with the engine, the head of the train pointing westward; now, we will say your passing track is on the south side;

now, if you use the engine alone, or suppose now you want to put those two cars on the spur track, between the caboose and the rear freight car, now you have got to move your train forward, haven't you, behind the switch stand, so as to get on the passing track?

A. Yes, sir.

Q. Now then, how do you get at the two cars that are on the spur that goes into the passing track from the west?

A. Then we would use the pole on the car, set it against the tank and handle it the same way.

5003 Q. Use the pole on the rear car of the train?

A. Yes, sir, push those cars out.

Q. Tell me how that is done; I don't know; I am asking you for information?

A. They can do it that way; they cut their train off their engine; or do you want some cars to the engine?

Q. I don't care which; the case I put was cars to the engine, because I want it put between the caboose and the rear car?

A. They cut off the cars they want, they go down to the switch and come back to this spur switch.

Q. That is two movements, a forward movement on the main track and backward movement on the passing track.

A. Well, a forward movement; you know the train is down there ready to go ahead.

Q. But you have to back, if your connection with the spur track happens to be——

A. They come up there and they push those cars out on the passing track, and throw the switch and couple up and proceed back to the train again; that would be four movements.

Q. To get those two cars?

A. Yes, sir.

Q. Now, in the case you put, where you pole them in, you will move west with your train until you get past the switch stand, then you will back onto the passing track?

5004 A. Yes, sir.

Q. If you can pole it in, you laid that on the rear car in the train and by that method, you will push those two cars on the spur in the passing track, and get them in the rear of those two cars?

A. Yes, sir.

Q. That involves a movement forward and movement backward, and also a movement of two cars on the spur track, to get them on the passing track?

A. That is involved in the backing up.

Q. It involves that movement?

A. Yes, sir.

Q. When you have got them on the passing track, you move forward until you clear the switch stand again on the passing track?

A. Yes, sir.

Q. And then you back your cars in order to get the caboose onto them?

A. Yes.

Q. How many movements does that involve?

A. Four.

Q. Suppose the condition or situation of those two cars was such you could not pole them in, they were too far away, then what would the movement be, until you got back on the passing track?

A. Go down here, come in on there, and back up those two
5005 cars. (Indicating.)

Q. Then you back past the switch stand that connects the spur with the passing track?

A. Yes, sir.

Q. Then you would go forward on that to reach the two cars?

A. Yes, sir.

Q. Then you would back again on the passing track?

A. Yes, sir.

Q. Then you would go forward to clear the switch stand to get on the main track?

A. Yes, sir.

Q. Then you would go back on the main track to get your caboose?

A. Yes, sir.

Q. How many movements would that involve?

A. Five.

Q. Wouldn't it be six?

A. Yes.

Q. Now, these instances that I have suggested, and the answers you have given, show how the conditions vary, don't they; they vary in nearly every movement; every movement is different from any other movement; I should not think it would be often that two movements would be precisely alike, occurring in a day?

A. It might, putting cars in the same side-track.

Q. If the conductor would have to keep an accurate track
5006 of the mileage that way, he would have to keep a rather extensive account; he would have to keep an account of each of those little movements.

A. Yes, sir, he would have to do that to get it accurate.

Q. Now, in order to spot the cars on more than one track, it may be necessary to make mileage on the passing track, and on the side-track as well, may it not, depending on the conditions and the locations of the cars and the place where you want to spot them?

A. It is frequently that an agent wants a car replaced; it requires just as much time to go in and replace that car as it does to put one in.

Q. In spotting cars, placing them and taking them out, you frequently have to use the spur track and passing track too?

A. Yes, sir, unless they head in on the passing track, as they come into town.

Q. I know there may be conditions when it doesn't exist, but there are conditions when you do even have to do that?

A. Yes, sir, have to use both tracks.

Q. Do you understand that the work sheet used by Mr. Wright,

and from which you have been testifying, shows the actual length of the passing tracks?

A. The length of the side-track may be all right, but he has got too many movements to set out a car.

5007 Q. I am not speaking about the movements; what I want to know is whether you understand that he gives the actual length of the passing tracks there?

A. He evidently hasn't got the passing track on there; he has got the house tracks, I see; that would be about right for the house track.

Q. About right, you say?

A. I couldn't say it was just right, because I don't know the length of them.

Q. I want to give you another illustration; a train comes in from the east to a station where there is a passing track and a spur track; the passing track is on north side of the main track?

A. Yes, sir.

Q. The spur track connects with the passing track at its east end—at the east end of the spur?

A. Yes.

Q. A train comes in on the main track, from the east; there are four cars setting on the spur track; those cars are numbered consecutively from the switch stand where the spur connects with the passing track, one, two, three and four, and you want to get cars two and four out of that spur and put them in the middle of your train; now, tell me what movements would be involved in doing that.

A. The train will come up here to the east end of the passing track; they will cut off their engine, they will proceed up
5008 the passing track, and reach up here.

Q. Don't use the word "reach in," because that is confusing.

A. They will proceed up the passing track until they get to the switch stand of the spur; they will go in here and they get hold of all those cars.

Q. The four cars?

A. Yes, sir; they will proceed back to the main line; they will set car #4 up here on the main line; they will back up to the switch, put car #3 on the passing track, back up the main line and set car #2 on the main line, back up, get hold of car #3, push it back in onto the spur where the 4 is; the engine will back up and go down on the passing track, go ahead until she gets past car four, and pole car-4 and 2 down to the train, back the engine out on the main line, couple up and go ahead.

Q. How many movements are involved in that—about 13 aren't there?

A. I didn't notice, but I can tell it to you; 12 I guess.

Q. I understand every movement of the engine is a movement?

A. Yes, sir—13 is right.

Q. Suppose those cars which you want to pick out in the order

which I mentioned awhile ago, were in the house track so you could not pole them out, what would be the movement?

5009 A. Turned on the track in the same direction?

Q. Yes?

A. The spur track goes from the main line?

Q. Yes?

A. They would stop at the head block of the spur; that first movement will be to go in to get those four cars.

Q. You have got to do something before you can do that?

A. No, sir, we stop here.

Q. At the east end?

A. Yes, sir; the engine goes in and gets hold of those cars, gets out on the main line, proceeds to the west end of the passing track; they jerk those cars, make a drop of them, jerk them in or drop them or make a running switch, drop them in the passing track, is four; the engine then proceeds down the main line, passes the head block, backs in on the passing track, gets hold of those cars; six; goes out on the main line, seven; backs down to the train, is 8.

Q. Have you provided in that for the movements that are necessary to get both cars; you remember that you have to get two cars out of there.

A. 12 movements.

Q. Suppose in the case I have cited, there should be a train going in the opposite direction, standing on that passing track at the time?

5010 A. Back them out of the road.

Q. How many movements would be required to back them out of the road?

A. One.

Q. Tell me where you would take it, just tell me what would be involved in that movement; you would have to move the whole train on the main track, wouldn't you? In the opposite direction from the train that we have been dealing with, that came there,—you would have to do that?

A. As I understand you, there is a freight train—

Q. Wait a moment; here is the passing track on the north, to which I call your attention, and when this train comes in from the east, of course that train going west is on the passing track; that train coming in from the east, part of that passing track occupied by a train that comes from the west, you have got to get that train out of the way, so as to get to the spur and reach these cars you wanted to take out; what movement is necessary to enable you to do that?

A. The freight train is meeting the local—let the local run up the main line and the train on the passing track proceed on east, and get out of the road.

Q. Then when you did that, and when the train on the passing track had gone, then what would you do with the local train?

5011 A. Drop it back to the switch.

Q. That would involve another movement of backing the entire train?

A. Yes, sir, provided there was a train in there, or in other words, we could cut the engine off and get up to this passing track and get in and get them.

Q. It would involve an extra movement, if the train is in there?

A. Yes, sir.

Q. In making those movements, they have to make running switches, do they not?

A. Yes.

Q. What is a running switch,—describe it, please.

A. If you want to set a car out here, for instance, and you would run down here three or four hundred feet, past the head block, a man standing on the footboard of the engine or on the pilot, or anywhere he can to uncouple it, and the train proceeds back, or the engine itself, with those two cars, goes back at the rate of six or eight miles an hour, or ten or twelve, whatever they think is necessary, and when they get to where they think the car will run in on the passing track, clear, the engine slacks just enough to let him pull the pin, and he gives him a signal to back up; this engine backs up the main line; that turns the switch between the engine and cars, letting the cars go in on the passing track.

5012 Q. Doesn't a running switch involve pretty rough handling of the car.

A. Sometimes the man who does that uncoupling, stays with the cars; he gets right up on top to set a brake, if necessary.

Q. In order to get the velocity to create the momentum necessary to carry those cars to the point you want to take them, you have to give them pretty rough usage?

A. Not any more rough usage than there would be in regular work, unless they come back against some cars.

Q. But the great hope of the personal injury lawyer is to get a case where there is a running switch, and that is because of the rough handling of the cars that it is supposed to be dangerous.

A. The cars would not be handled any rougher there than anywhere else, unless they go back and strike other cars.

Q. As a matter of practical operation, there is frequently a great deal of danger?

A. Not any more than any other switching.

Q. Do you know the average cost of car repairs?

A. No, sir.

Q. Or engine repairs?

A. No, sir.

Q. That is a subject you have no familiarity with?

5013 A. No, sir, I am not versed on that.

Q. Or the cost of the maintenance of cars?

A. No, sir.

Q. Is a coal car of 100,000 capacity a very large car?

A. Yes.

Q. One of the largest that is made and operated?

A. No, sir.

Q. It is a very large car, extreme type of car?

A. Yes, sir, that is about the largest there is; I have seen 150,000 capacity cars—the Southern Railroad Co. has a 150,000.

Q. There is 8 driving wheels under an engine, I believe—I am speaking of driving wheels?

A. On some trains eight, and some four, and some six.

Q. Now, there is eight wheels under a car, isn't there?

A. Yes, sir.

Q. Now, Mr. Roberts testified yesterday that the wheel base of a car is 30 and a half feet; that the wheel base of an engine with eight wheels is 13 or 14 feet; I don't know but what he said 12 or 13.

A. 13½.

Q. What effect in the way of concentrating the weight of the load, does that difference in length of wheel base, have; doesn't it have the effect of concentrating the load,—the weight?

A. Of the car or engine—you are speaking of?

5014 Q. The weight, whatever it is, whatever it is, the weight of the engine or weight of the car, take the body of the car, in case it is the car, and the body of the engine, in case of the engine, isn't the weight very much more concentrated on the short wheel base of the engine?

A. The engine, we will say, has eight drivers and the trucks.

Q. You said four, six and eight; take six; what would be the wheel base if it had six drivers?

A. I don't believe I could tell you offhand.

Q. It would be less?

A. I am not an engineer you understand.

Q. Well, I understand it is 13-½.

A. The two front drivers are closer than the two back ones, and then there is a pair of trucks yet under that engine, or even a set of trucks; there is a pair of wheels in the front part of the engine; that engine, if I understand it just right, the weight is distributed the full length of that engine, on the six drivers and the truck.

Q. I think Mr. Roberts testified that the weight would be more concentrated on an engine than on a car; that is a fact, isn't it?

On a car, the half of that carload is on the trucks, on one pair of wheels, on one truck; that would give more weight in one place than it would on the engine.

Q. And the wheels are under the trucks, are they not?

A. Yes, sir. Now, say the car is 50 feet long, one of those 100,000 capacity; there is lots of them 50 foot cars; 25 feet of that car weight is on the front trucks and 25 feet is on the back trucks, where on an engine, the engine is on the six drivers and the pair of trucks; in other words, it is on ten wheels and the car is on four.

Q. I think Mr. Roberts, who is perhaps more familiar with that subject than you, or I either, testified yesterday that an average car had eight drivers, and that there would be a greater concentration of weight on the wheels of the engine than there would be on the wheels of the car?

Mr. HILL: I didn't understand Mr. Roberts that way.

Mr. MOORE:

Q. Now the point I want to get at is this, is the weight on the 8 engine wheels greater than the weight on the eight car wheels?

Mr. HILL: Do you mean per wheel, or the whole amount?

Mr. MOORE:

Q. I am speaking of the driving wheels of the engine.

5016 A. If the engine is heavier than the car——

Q. Assuming that it is the same weight.

A. No; if the gentleman there will give me the length from the pony trucks, as they call them to the back drivers——

Q. I am just speaking of the driving wheels, the weight is on the drivers, as I understand; 113 feet is the wheel base.

A. It is from one wheel to another, but what is it from center of the back driver to the center of the front driver?

Q. Mr. Roberts testified yesterday it was 13 or 14 feet—the wheel base, any point between the two, from outside to outside; we will assume that it is about 13 feet.

Mr. HILL: I don't believe that is quite a fair examination; Mr. Simmons said he was not a mechanical man; I haven't asked him any questions about mechanics at all.

Mr. MOORE:

Q. I will put it a little different; I will assume, whether it is correct or incorrect, that there is a greater concentration of weight on the driving wheels of the engine than there is on the wheels of the car, both on account of the manner of loading, and on account of the fact that the engine is heavier than the car.

A. If the gentleman will tell me the distance between the wheels of the truck, from center to center of a car truck?

5017 Mr. ROSING: 5 foot six, same distance there is between the two drivers.

A. Then I think there is more strain on the car than there is on the engine; you have 13- $\frac{1}{2}$ feet, and you have 11 feet the other way.

Q. I don't understand what you mean; I thought there was 30- $\frac{1}{2}$ feet on the car—the wheel base is 30- $\frac{1}{2}$ feet on the car.

A. Yes, sir, but that gives a harder strain on the car than on the engine; I don't think I could just explain why, but I do believe that I know it is harder on the track; the car than the engine.

Q. Assuming that there is a greater weight on the driving wheels, on account of the difference in length of wheel base, and on account of the greater weight of the engine than the car, if that were true, would it not result that the engine would be likely to produce more damage to the track than the car?

A. I think not, on account of the wheels, which are larger on the engine than they are on a car.

Q. The gentleman testified yesterday that the engines were provided with more efficient springs, which protected the engine itself and operated them in certain ways with which you are perhaps

familiar, wouldn't that have a tendency to diminish the injury of the engine on the track?

5018 A. I think so. Now, let me make a little remark on that; there is many scales on the system that you cannot weigh a fifty foot car; they weigh that car, half at a time; what I mean by that is, they weight the front end and then they shove the other end on and weigh it, or take half the weight; we had those scales at Fort Smith, until they have just overhauled them.

Q. The car is longer than the scale?

A. Yes, sir.

Q. Mr. Roberts testified yesterday that they have to classify engines for the purpose of selecting those that can go over certain parts of the tracks, and keeping certain engines from going over weaker parts of the track, and also, they classify them for bridges, in order to keep particular engines for particular bridges, and that there is no classification made of that kind for the car; if the car inflicts greater damage on the track, why do they have to classify engines and do not have to classify the cars?

A. I can cite you to a road that won't let a hundred thousand capacity car go over her road, if she can possibly help it and that is the Arkansas Central.

Q. How is it on the Iron Mountain.

A. That is the Iron Mountain system,—the Arkansas Central.

Q. You say they won't let a hundred thousand car go over the system if they can help it?

5019 A. The conductor has orders not to take them; that is the Iron Mountain.

Mr. HILL: So reputed in our neighborhood?

A. Yes.

Mr. MOORE:

Q. Is the Arkansas Central part of the Iron Mountain Road; isn't that a little branch that runs down from Fort Smith to Paris, isn't that a different road from the Iron Mountain?

A. It belongs to the system; it is handled independent.

Q. The stock of that corporation may belong to the Missouri Pacific Railroad Co.—

Mr. HILL: I think Mr. Johnson testified that it did.

Mr. JOHNSON: No, sir, I testified I didn't know anything about that.

Mr. MOORE:

Q. Isn't the Arkansas Central a separate corporation, or do you know about that?

A. It is handled independent, but of course, I have no way of proving that it belongs to the Iron Mountain, but I am satisfied it does.

Q. You really don't know anything about that?

A. No, sir.

Q. And it is the Arkansas Central you refer to as refusing to take a hundred thousand pound car?

5020 A. Yes, sir; I loaded a car of sand, is why I know this, and the conductor refused to take it.

Q. You have never operated a train as an engineer or conductor?

A. No, sir.

Q. When did I understand you to say you severed your connection with the railroad service?

A. 1907, I believe—June 16, 1907.

Q. Where were you living at that time?

A. Ferriday, La.

Q. When did you move to Fort Smith?

A. Probably eight or nine days after that, about the 20th of June.

Q. What business did you go into there?

A. Sand business.

Q. What was your position on the Louisiana Road?

A. Division Engineer.

Q. You mean civil engineer.

A. No, sir, division engineer; that is, have charge of the bridge and building, track and everything on the right-of-way.

Q. Did you sever your connection with the railroad company on account of differences you had in connection with the officials of the road?

A. Yes, sir.

Q. I didn't mean to ask you what it was?

A. Yes, sir.

5021 Q. Were you discharged?

A. No, sir, here is my resignation; I sent in my resignation on the 7th of June and received relief on the 16th; I never was discharged in my life, but not only that, I am doing business with them now.

Redirect examination.

By Mr. HILL:

Q. Your relations with the Iron Mountain have always been pleasant?

A. Yes, sir, I have my clearance in my pocket.

Q. Mr. Moore has questioned you as to a great many switching movements here, which you have explained at length; I will ask you if those are the usual and ordinary movements in the operations of local trains?

A. No, sir, they are rare movements.

Q. Did you take into consideration those rare movements, as well as all other movements, when you made your estimates you have heretofore given?

A. Yes, sir.

Q. You took it by large and by small?

A. Yes, sir, because I am very familiar with that movement of trains; that is not done very often.

Q. It can be done and is done as illustrated there, I presume occasionally?

5022 A. Yes, sir.

Q. I believe he asked you, if in order to get an accurate statement of the mileage, the conductor would have to keep track of all these movements; I will ask you if to make a fairly accurate approximation of the mileage, you take the business that is done, if it is not very much along the same line, and you can make a fair approximation if you are familiar with the road and the way it is handled.

A. Yes, sir, a local conductor could, a good deal better than I could.

Q. Of course, he would have to take in consideration these unusual and abnormal movements that have been asked about, as well as all others?

A. Yes, sir, very often they do not stop at all.

Recross-examination.

By Mr. MOORE:

Q. When trains meet at stations, they frequently involve a more complicated movement where there is switching to do than it would ordinarily, wouldn't it?

A. The side-tracks are provided for that purpose, and there should not be but very little detail.

Q. But if the passing track is occupied and it has to be used in making a switch, it complicates the problem and increases the amount of switching to be done necessarily?

5023 A. The train would have to move up.

Q. Doesn't it occur, when through trains meet, that there is really more complicated movements than those I have illustrated awhile ago, in practice?

A. Yes, sir, the local has to take the siding to let the through freight pass by; it is not very often that a through freight takes a siding.

Q. Such movements as I illustrated, have to be made when there are cars to be picked up which are scattered along on the side-tracks.

A. The movement I illustrated has got to be done that way—there may be some other way it could be done.

Witness excused.

5024 HUBERT F. JERNIGAN, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would state your name, age, residence and present occupation?

A. Hubert F. Jernigan, 34, present occupation working for Citizens' Investment & Security Company as clerk.

Q. Residence?

A. 2608 West 14th St., Little Rock.

Q. You had several years of railroad experience; I wish you would state in brief, just what experience you have had in railroad service?

A. My first experience was with the Iron Mountain on the Central Division, commencing somewhere in the Spring of 1903, and ending somewhere in the fall or Early Winter, about Christmas, 1903.

Q. In what capacity?

A. As Brakeman.

Q. Then what was next?

5025 A. I quit railroading for some two or three years, and went to the Rock Island in 1906, and stayed until the latter part of 1907.

Q. In what capacity?

A. Brakeman.

Q. What run did you have on the Rock Island?

A. Freight service only; I had a local sometime, through freight, and work train.

Q. What division did you work on?

A. Both divisions out of here, east and west.

Q. That is from here to Memphis and from here to Booneville?

A. Yes, sir, most of it was on the east end from here to Memphis.

Q. Are you familiar with the way local and through freight trains are handled?

A. Yes, sir.

Q. You have had no passenger experience?

A. No, sir.

Q. You quit railroading in 1907?

A. Yes, sir.

Q. What part of 1907?

A. It was in the last of 1907,—September, or October, or November, something like that.

Q. It has been testified in this case that it is impossible and impracticable to make any fairly accurate estimate of the amount of switching done by a local freight engine,—that is the switching
5026 ing mileage done by it; I will ask you if in your experience, you think that a fairly accurate estimate can be made of the switching mileage of a local engine or an engine in local service and if so, how you would do it?

A. Well, I couldn't figure that anyway, only by figuring the time put in.

Q. How would you do that?

A. For instance, take a division—for illustration, a division of 100 miles, and a local on that run will put in at least 16 hours, and figuring the running time at 20 miles per hour—

Q. That is the running time between stations?

A. Yes, sir, that will leave you 11 hours for switching and unloading freight, and other work.

Q. Just take a run and illustrate that,—any run that you are familiar with?

A. I can follow it up from here to Brinkley, pretty well, because I am better acquainted with that—it is a 63 mile run.

Q. Just follow that run, if you are more acquainted with that?

A. Leaving out of here, say seven o'clock in the morning, my first stop would be Galloway, and there is usually some local for that place—merchandise, and possibly a switch or two to make, and the next stop will be Kerr, four miles from Galloway, usually 5027 spot a car or two there, and merchandise; the next stop will be the tank—there is a spur between there and the tank, usually stop there at the saw mill, and then at the tank, and the next stop will be Lonoke, 20 miles from here; I cannot get my stations in there between Lonoke and Carlisle now, cannot remember the names of them, but anyway there is about one stop in there, and then comes Carlisle, and there is two stations between Carlisle and Hazen, at which there is most always a stop, and then from Hazen there is Mesa; there is always a stop there from one to three hours at Mesa—hardly ever any merchandise to unload there; at DeValls Bluff, a mile from there, there is a good deal of switching on account of those mills, button factories and one thing and another.

At Biscoe, there is another stop there, and some merchandise to unload, and then there is a stop at Brasfield, and one at Eden, and that puts you at Brinkley, the next stop.

Q. At about what speed does your engine make the switching?

A. I should judge four or five miles an hour, put it at that—five miles anyway.

Q. When you get to a station on an ordinary run, how do 5028 you arrange your switching—how do you go about it, to handle the switching that is to be done?

A. We know what we have to set out, if any, and then we go to the agent and get a switch list of what switching he wants done, and then we go to the track and look up the number of cars we have to move, for instance, between the house track and so on, and what we had to pick up and then we go on with our work, as soon as we get everything looked up.

Q. While you are arranging that, what is your engine doing?

A. Usually standing still, or one man has the engine getting it in position.

Q. I suppose there is a great deal of variation in switching at stations, owing to the difference loads you have to pick up and set out, and the different modes of handling and all those matters?

A. Yes, sir.

Q. I will ask you if anyone thoroughly familiar with the road can make a fairly accurate estimate of the amount of switching that is usually done, that is, taking the extremes on one side, the most switching it does, and the least switching it does, and the ordinary run, if you can make a fairly accurate estimate of the average conditions?

A. That would be pretty hard to do, from my recollection of the run now.

5029 Q. I am not speaking of your recollection now, take any-one thoroughly familiar, take it at the time you were running

there and knew of the conditions, could you make a fairly accurate estimate of the mileage done in switching on that run?

A. I don't believe I could.

Q. I am not asking you to do it now?

A. You want to know if a man could.

Q. Yes?

A. I should think so.

Q. I understand you have been out of it for several years, and you don't recall all these things?

A. Yes, sir, I have been out three years.

Q. I am not asking you could now, but if you were familiar with that and making the run every day, you could make that estimate?

A. I should think a man ought to.

Q. Could he make it with reasonable accuracy?

A. Yes, sir.

Q. You would work it out on the time?

A. Yes, sir.

Q. On that Brinkley division, how much time did you say was allowed for your run?

A. I figured awhile ago on a hundred mile division.

Q. That is about the average division.

5030 A. Yes, sir, what I illustrated there was only 63 miles.
Q. Take your one hundred mile run, how many hours would be allowed for one hundred miles?

A. I don't know a local run of one hundred miles; the time on the local from here to Brinkley is considered ten hours, may be eleven, for sixty-three miles; that gives them time to include the switching and all, as well as I remember.

Q. About what time did you generally make?

A. Between stations or over the division?

Q. Over the division?

A. We usually put in about 12 to 14 hours, sometimes more.

Q. About what time would you make on that run between stations?

A. 20 to 25, or 30 miles an hour. We ran 25 miles right along.

Q. Then you would take that running time, what you usually made while running, deduct that from the time that you took over the division and count the difference as done in switching?

A. Yes, sir.

Q. That wouldn't represent all the time lost either, would it?

A. No, sir, there is time meeting trains we couldn't be switching.

Q. Taking water too?

5031 A. Yes, sir.

Q. Waiting at the station here, getting your list?

A. Yes, sir, and also there is the unloading of your merchandise, the engine is standing still then, while you are doing that.

Q. If you took your plan of making it, you would still have an excess of mileage allowed for switching, wouldn't you?

A. Not much.

Q. You say you would be counting your train as switching while

part of the time would be lost in doing these matters you have mentioned?

A. Yes, sir.

Q. It is in evidence in this case by the railroads, in an exhibit they have filed, that the local train stops about eight times to the through stopping once, I wish you would explain in ordinary railroad practice, what stops a through train necessarily makes in its run?

A. It is stopped for orders and for water and fuel, and meeting points and junctions.

Q. What about meeting other trains?

A. That is meeting points, meeting other trains; that does not say anything about setting out of bad orders, and picking up perishable stuff loaded since the local had passed.

5032 Q. That doesn't count the work that the through train does, picking up cars and setting them out?

A. I left that out.

Q. That sometimes occurs?

A. Yes, sir, very often they have to set out bad order cars, and most always, in a through freight run, you have one or two to set out at different stations along the road.

Q. Take the stops of a local, about how many are necessary stops for a local?

A. On an average,—it is a good deal owing to the population, the distance apart of the stations.

Q. Take one of their average runs, on the Rock Island, I presume that is the line you are familiar with?

A. They stop on an average of every five or six miles.

Q. If this through would be eight to one, that would be making the through stop about every forty or fifty miles?

A. Yes, sir, but they would cut that half in two; they stop about every three or four times—the local stops about every three or four times to the through.

Q. Explain just how that is, take an average run—by an average run, I mean *would* that would fairly illustrate usual conditions?

5033 A. You can take the Rock Island fast freight run from Memphis here, and without stopping to meet trains or stopping for orders, they have about eight stops?

Q. What is the distance?

A. 132 miles from Argenta.

Q. That is the best time they make?

A. That is without stopping for orders or meeting trains?

Q. We are taking an average run, taking in what it really stops for meeting trains and all that, about how many stops would that make?

A. On an average, meeting trains, it would stop at least ten or twelve times.

Q. They would be stopping—

A. They will stop every fifteen to twenty miles anyway.

Q. The best they can make?

A. Yes, sir, the best they can do.

Q. Are you familiar in general freight service, with the way they handle the red ball trains, or fast freight trains?

A. In what way?

Q. There is such a train as that?

A. Yes, sir, the Red Ball train is a fast train.

Q. How does the handling of that train differ from other through freight trains; does it stop as often or does it do any work?

5034 A. Not necessarily; they usually go over the road faster than other trains.

Q. It gets over the road faster than other through trains?

A. Yes, sir.

Q. When it gets into a terminal, what is the difference between it and other freight trains?

A. Not any; it is broken up like the rest of them.

Q. You don't find them shunting them right through, as a general rule?

A. No, sir, there may be some trains once in awhile that will go right through, but very seldom.

Q. When you find a train that goes through that way, is it one of these red ball trains?

A. Yes, sir, usually.

Q. Are other through trains broken up more than their red ball trains?

A. Not in a yard like this, except in rare cases.

Q. Don't they have a lot of through trains, classed as through trains, that pick up cotton and things like that?

A. They pick up cars of different stuff.

Q. They will be broken up in the terminals too?

A. Yes, sir.

Q. Your idea is that all these trains get broken up, whether they are throughs, red balls or locals?

5035 A. Yes, sir.

Q. It is just a question of degree, a red ball will get broken up the least of any?

A. Yes, sir.

Cross-examination.

By Mr. MOORE:

Q. I believe you began the railroad service in the spring of 1903, on the Central Division of the Iron Mountain?

A. Yes, sir.

Q. And continued until the following winter?

A. Sometime in the fall or early winter.

Q. Where was that service?

A. On the Central Division of the Iron Mountain.

Q. That is the Little Rock and Fort Smith line?

A. Yes, sir.

Q. Then you went out of the service?

A. Yes, sir.

Q. How long were you out of the service?

A. Until the Spring of 1906, I guess it was.

Q. How came you to quit the service at that time?

A. Of my own accord, to take a position in a store.

5036 Q. Then you went to work on the Rock Island in 1906?

A. Yes, sir.

Q. What time in 1906?

A. Early summer, latter part of the spring or early summer.

Q. You quit the railroad service again in 1907?

A. Yes, sir, November.

Q. That service was on the Rock Island?

A. Yes, sir.

Q. The character and amount of switching varies, I suppose, from station to station?

A. Yes, sir.

Q. Depending upon local conditions at the different stations?

A. Yes, sir.

Q. And also, I suppose it varies from day to day, depending on the condition of the traffic?

A. Well, not very much.

Q. You could not estimate that the switching at each station would be uniform from one day to another?

A. It would not be exactly the same, but practically the same amount would be performed on each day; the stations out on the east end would be almost the same each day?

Q. You had no experience on the main line of the Iron
5037 Mountain Railroad?

A. No, sir.

Q. I suppose you know very little about their red ball trains?

A. Nothing only the talk I heard from the brakemen on the Iron Mountain when I was switching with them.

Q. You know nothing of your own knowledge?

A. No, sir,—and my general observation.

Witness excused.

5038 D. HARSTON, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. Please state your name, age, residence and present occupation?

A. My name is D. Harston, age 37, and I am engaged in the dry goods business.

Q. In what place?

A. In Argenta, reside there.

Q. What railroad experience have you had; I wish you would just give a little biography of the railroad service you have had, beginning at the first?

A. My first railroad experience was with the Mountain, working in a bridge gang, and later in the water service for the Mountain,

later with the old Little Rock and Memphis, as brakeman and conductor; then with the Mountain as switchman, and I worked two or three years for the Rock Island as conductor, brakeman and switchman, and assistant yardmaster; ran a train on parts of the Iron Mountain, and broke there; yardmaster on the Union Pacific, and conductor on the Valley Division of the Iron Mountain, and yardmaster at McGehee for awhile.

5039 Q. Your service all been in freight?

A. Yes.

Q. Haven't had any passenger service?

A. No.

Q. When did you leave the railroad service?

A. About two years ago.

Q. You have been conductor on both local and through trains?

A. Yes.

Q. Brakeman on both local and through trains?

A. Yes.

Q. What divisions have you had service on, on the Iron Mountain in Arkansas?

A. I have worked on what is known as the Central and Valley Divisions, and also on the White River.

Q. It has been testified to in this case by the Railroad witnesses in rebuttal, that it is impossible to make an accurate estimate of the amount of switching mileage made by a local locomotive—take a run, for illustration, of 100 miles of a local freight train, can you or anyone thoroughly familiar with that run, and with the service, make a fairly accurate estimate of the amount of switching mileage performed by the local locomotive?

5040 A. About the only way that I would know of, that it could be estimated, would be to take the length of time at each place that they were switching.

Q. Can anyone familiar with the road do that; I don't mean could you do it now for occurrences several years ago, but take a man in the current work?

A. I think he could; that is, he could estimate somewhere in the neighborhood of the number of miles.

Q. What I mean is the general average condition; of course, I understand these things would vary every day.

A. Yes, sir, some seasons of the year, the switching would be very much heavier, but I believe a person could estimate within a few miles.

Q. Take in detail, how would you estimate that, take a run of 100 miles, or any actual run that you are thoroughly familiar with, and make your estimate on that?

A. If I was going to figure up the number of miles I made in switching, I would take the time I was engaged in switching, the length of time at each station, and an engine in switching, seldom runs faster than ten miles an hour——

Q. It don't often get that speed?

A. Very seldom.

Q. What is about the average speed of an engine engaged in switching?

5041 It runs from nothing to about eight miles an hour; there is more time consumed in stopping, or as much, than there is in an engine running ten miles an hour; it would make an average of possibly five miles an hour or possibly not as much.

Q. Take that as a factor, say an average of five, then how would you get at your mileage; I interrupted you to get at that point.

A. If I figured thirty minutes switching time at each station, I would figure I would run two and a half or three miles; that is, I would keep the time of switching I had done, and add it up and make it into hours, and average it about five miles, or may be not so much.

Q. Can't you take a run you are familiar with, and figure it out, just the time you would spend in making the run and the amount of time you would spend in switching?

A. It is quite often done; I don't know whether any account is made of it, and charged up in that way, but in a man's delay report, that they had at the time I was with the Iron Mountain, we had a blank for delays; we would show the name of the station, what was the cause of the delay; if a man was at a station an hour unloading local, say for 40 minutes, and possibly switching 20.

5042 Q. By unloading local, do you mean less than carload commodities?

A. Yes, sir.

Q. We have been calling that, in this case, L. C. L. commodities?

A. Yes, sir.

Q. You are referring to the same thing in calling it local?

A. Yes, sir.

Q. Go ahead?

A. I believe I have about finished.

Q. Take the average local run in Arkansas, with which you are familiar, something like seventy or seventy-five or one hundred miles, something like that, what time was usually consumed in making that run from division to division?

A. From 10 to 14, and I have been on the road 24 hours, on a division of from 96 to 101 miles.

Q. Those would be extreme cases?

A. That is extreme cases.

Q. Take the average, making an allowance for extreme cases and quick runs?

A. I don't believe the time should average, considering good seasons, as much as 15 hours a day.

5043 Q. Of the 15 hours, as an average run, part of that would be in switching, and part of it would be lost in waiting for other trains, and waiting for orders, and things of that kind?

A. Taking water, orders, meeting trains, unloading merchandise.

Q. Then of that 15 hours, how much of it, in your judgment, would be used in actual running on the road, and how much in switching, and these other causes?

A. In a hundred mile division, seven hours to eight, I think, would

be a pretty fair estimate in running over the division, what we would consider running time.

Q. About half the time would be spent in making the run from station to station?

A. And meeting trains and other details—unloading.

Q. And not over half of it would be spent in switching?

A. Not, it couldn't be half.

Q. About how much, taking the average conditions, and average run, just make an estimate on average conditions of an average run, what amount of time would be spent in switching?

A. I don't think, in average conditions, the amount of time spent in switching should exceed three or four hours?

5044 Q. Then you would put that switching at three or four hours,—at what speed?

A. About five miles an hour, I don't think it would exceed that; I don't believe it would be that much.

Q. Would it be difficult for a man thoroughly familiar with each run, to make these estimates and give a fairly accurate mileage of the switching done by a local locomotive?

A. A man should, I think, that was working, as I said, his delay reports should show the time that was consumed in running between stations; that is, the dead time at stations, and what he was doing in those stations, and show the number of hours consumed in the switching.

Q. This is a proposition to which his attention is necessarily directed by these reports he has to make out?

A. It should be, yes.

Q. I believe you stated you had service on both through and local trains on the Iron Mountain in Arkansas. It is in evidence in this case, on both of the railroads, that the local stops eight times as often as the through train; I would ask you to state your opinion on that proposition?

5045 A. That a local made eight stops where a through train made one?

Q. Yes?

A. I don't think so.

Q. That doesn't square with your experience.

A. I don't believe it would.

Q. Explain the various stops made by each, will you?

A. As a usual thing, when business is good, a local will stop at almost every station.

Q. As a general thing, about how far are those stations apart?

A. I don't think they would be less than five or six miles apart; I don't know whether they would average that close or not; I never figured them down, but I would think five or six miles between stations; they would have to make water tank stops, and they would have to meet other trains.

Q. You are referring to the through or local?

A. Locals, in making each station stop; they would have to make the water tank, and then the crossing stops, while in through trains, they would make the water tank stops, the crossings, and meeting

points with other trains; with superior trains, trains that had been given the right over them.

Q. What about orders?

5046 A. Orders too; you take between here and Pine Bluff, 42 miles, I believe, and I don't know that I ever went out from here to Pine Bluff without making a stop to meet something, or to get orders; also, had to stop for the crossings, and there are very few trains that are full tonnage trains, that will run from Argenta to Pine Bluff with a tank of water.

Q. That would mean one water stop?

A. Yes, sir.

Q. Suppose they had a bad order car in the through train, what would you do with that?

A. That is according to the nature of the defect.

Q. Do they carry it along or set it out—I presume you mean according to the nature of the defect, they do one or the other?

A. Yes, sir.

Q. Is it frequent or infrequent, that a through train stops to set out a bad order car?

A. It is not infrequent that they stop to cool a hot box or brass one,—sometimes they set out cars.

Q. What freight trains does a through have to take siding for?

5047 A. In most cases, I believe in all cases, for passenger trains, which would be first class on the time table. They are superior to second class, and it is according to what class the through freight is in, what trains would be superior to it; you take some trains, and they could be second or third class trains and still be a through train.

Q. And such second or third class trains would take more sidings than others?

A. Than their second class.

Q. What effect would the traffic on the road have?

A. It would cause stops oftener.

Q. The road with the heavier traffic, and single track, would have more frequent stops than one of light traffic?

A. Yes, sir.

Q. What would be your judgment about the comparative stops of the local and through train, taking an average run and an average condition on the Iron Mountain in Arkansas?

A. Well, on the parts that I am familiar with, I wouldn't think that a local would stop more than three or four times as often as a through freight would; that is, as a train running as a through freight.

Q. You have made out wheel reports, I suppose?

A. Yes, sir.

Q. And are familiar with the system on the Iron Mountain of making wheel reports?

5048 A. Yes, sir, was when I was working there.

Q. The wheel reports have the following on the back of them: "Cars must be reported in train order, commencing with the caboose, to show make-up of trains leaving district terminals."

Are you familiar with that.

A. I have made them out.

Q. You say you have made these?

A. Yes, sir.

Q. Explain the system of making them, in force on the Iron Mountain?

A. If I am not mistaken, the instructions read to make them beginning from the caboose, but I usually made the wheel reports from the engine back, and running on the Valley Division, they made the head end of the train up first; I naturally started back from the head end.

Q. That would make it in sequence, whether you began from one end or the other?

A. Yes, sir, in putting them down on the wheel report, I usually started at the top of the page and followed them on.

Q. Was this direction which I have read you, carried out in actual practice on the Iron Mountain?

5049 A. As far as I know it was, as much for their convenience as anything else.

Q. Was that a more convenient way of doing it than any other?

A. We stood less chance of overlooking any cars and getting them all on the wheel reports.

Q. Are you familiar with Red Ball #55 on the Iron Mountain?

A. I have worked in the yards, but I never rode 55.

Q. You know what the train is?

A. It is a high class merchandise train.

Q. How does that train compare with other through freights on the Iron Mountain, in the way it is handled?

A. It is handled in preference, as a usual thing, because they are higher class freight; the Red Ball is moved with more dispatch.

Q. How is it handled in the terminals as compared with other through trains?

A. It is now gotten in and out in as short time as possible.

Q. How much switching is done on that train in the terminals?

A. I don't know what is being done—I don't know what changes have been made since I left; at the time I was working there—

Q. What I want is the switching done in terminals on 5050 that #55, as compared with other through trains, whether it was more or less?

A. At that time, there was considerable switching done on #55, from the fact that they brought 57's stuff—that was the Valley fast train—down on 55 at that time, and it had to be thrown out; there was stuff for Little Rock proper, that had to be switched out, and I have worked on that train, when there was possibly 25 or 30 minutes hurry-up switching on it.

Q. Now, compare the switching that would be done on other through trains with that—the average conditions, I am speaking of.

A. With other through trains, there are other through trains that have come into the terminals in almost as good shape, while there are others that there has been almost one in and one out all

the way through—that is, switching for almost—possibly there would not be two cars for the same place, but what there had to be switches made on them—like lumber for Louisiana, possibly some would be going to the Central Division—possibly some south; possibly some to Thebes, and possibly some to St. Louis.

Q. Did you have experience on the railroad, either in 5051 braking or switching, in the days of the old equipment, link and pin couplers and hand brakes, and also in the days of the automatic couplers and air brakes.

A. I had some experience with the link and pin, that is before the automatic became generally used; when I first went to rail-roading, they were scattered, and there was a great deal of coupling with link and pin couplers.

Q. You observed the operation of trains, and had experience with the operation of trains in both kinds of equipment?

A. Yes, sir.

Q. In this case, there is an issue as to the amount of damage done to freight cars in stopping and starting of trains; an issue has been made up, as to whether more damage or less damage is done with the modern equipment or with the old equipment. I wish you would give your experience on that, just take the stopping and starting of freight trains under the old system and under the present.

A. In my judgment, there would be more damage from the link and pin, from the fact that there was more slack; in starting a train, the head end, the engine would have more start, jerk the hind end more, and in stopping, it would be the same way; especially in 5052 switching, what air they had would be out, and the head end would stop, and the slack would all run up in a bunch; if the cars were loaded with lumber, it would be more liable to knock out the ends, and possibly do more damage to the draw bars, that is as to the cars handled.

Q. I am referring to it, car for car?

A. Yes.

Q. Take the damage done to cars in switching; would there be more or less damage to the cars under the old system than under the present?

A. More with the link and pin, because there was more starts and more sudden stops and more slack to bunch up.

Cross-examination.

By Mr. MOORE:

Q. You say there were more starts and more sudden stops with the old system than with the present?

A. Yes, sir, that is in the switching; the jar was more severe.

Q. Have you ever worked in the repair shop?

A. Very little.

Q. Do you have any special knowledge in regard to repairs, cost of repairing?

A. No, sir, I have no knowledge as to the cost of repairs.

5053 Q. You have no knowledge of the distribution of the repair accounts?

A. No, sir.

Q. It is not in the line of the work you were engaged in?

A. No, sir.

Q. Are the switching facilities, such as passing tracks, side-tracks and spurs the same at all stations on the roads you have worked on?

A. Are they the same at all stations,—in which way?

Q. I mean the same lay out of the side-tracks and spurs, and the same length of tracks, and spurs?

A. Do you mean of the same length?

Q. I asked you if they were all alike, or are they different at different stations on the roads you have worked on?

A. I don't exactly understand the question—alike in what way—as to the location or as to the law of the ground?

Q. I am not speaking about the law of the ground; do they have the same switching arrangements, same arrangements of side-tracks and spurs at all stations?

A. They don't have the same at all stations, because there is more tracks at some stations than at others.

Q. There is a great variety and there is no two stations exactly alike in the arrangement of spurs and side-tracks?

5054 A. Yes, sir, there are lots of them a great deal alike, possibly just a few car lengths' difference in length.

Q. At some stations, I suppose, the passing track would be on the north side of the main line and the house track possibly on the opposite side—that is the case, isn't it?

A. Yes, sir.

Q. And sometimes the house track would be on the opposite side of the station house from the main track and sometimes on the same side?

A. There is a very few places where the house track is on the same side as the main line, because the main line at stations, is fixed convenient to the unloading of passengers.

Q. Doesn't the amount of side-tracks and spur tracks, depend upon the character of business at the station?

A. Yes, sir.

Q. And the number of industries and amount of switching that is necessary to be done at different stations?

A. Yes.

Q. Take a station for instance, like De Vall's Bluff, on the Memphis Road, there is a great deal more switching required there than at some other stations?

A. Yes, sir.

Q. And the same is true at Brinkley?

A. Yes, sir.

5055 Q. It may be so at Forrest City, how is that?

A. There is considerable yard room trackage at Forrest City.

Q. Another thing, I believe you stated a while ago, that the amount of switching at times depended upon the traffic?

A. The amount of switching depend upon the traffic?

Q. Didn't you state that a while ago?

A. It don't depend on the traffic; it depends on the stuff that is moving from the stations.

Q. That is the traffic, isn't it?

A. In one sense, but it could be through traffic——

Q. I mean the traffic at the stations?

A. Yes, sir.

Q. Does that vary at different times?

A. Yes.

Q. How did you find it in that respect—was the switching at stations along the road pretty much alike or different?

A. It was different.

Q. How was it with regard to the different periods at the same station?

A. The seasons had something to do with different stations.

Q. Were there variations in the amount of switching to be done at some stations from day to day and from time to time?

5056 A. There was some difference from day to day and also from time to time.

Q. I believe you stated they would be switching two or three hours at a station some days; that would depend upon the amount of business for that station?

A. That would be for the amount of business at the time; naturally if the business was heavy—the switching was heavy and would take more time.

Q. In the nature of things, I suppose there cannot be regularity in that respect?

A. I suppose not.

Q. How many spurs or side-tracks are there at De Vall's Bluff?

A. I don't know; there used to be, when I was on the road there, one that joined the main track a few yards past the station, a little saw mill, that De Vall's Bluff did the billing for, and leaving back of the house, was a track that ran around to a button factory, and there was one next to that where they loaded ties, and a little spur dropped off from that, where they were loading some heading, and then there was a track that went straight towards the river, with four or five or six little tracks, called the run-around tracks.

Q. The amount of time and work you would have to put in switching at De Vall's Bluff would depend upon the location
5057 of the cars left there that you would have to spot?

A. Yes, sir, and location of the cars going out.

Q. And it would be just as variable as the locations there?

A. At different times, yes.

Q. I believe you said you ran as high as from the start to ten miles an hour, in switching?

A. I guess there was times when the engine would be running that fast.

Q. Would the brakeman ride the cars?

A. Sometimes, it is according to how many men was on the crew, and how lazy they were; often a man runs along and holds the lever

up, as often as he hangs on the corner; it depends on the man; sometimes a man will run along all day, and others will ride all day.

Q. Where was your last railroad service?

A. On the Rock Island.

Q. When was that?

A. I think it was last May, was a year ago, possibly.

Q. How long had you been in that service?

A. I don't just remember, but several months possibly; I believe I was there, if I am not mistaken, 15 or 16 or 18 months—something like that; I went to work in December—I think about 15 or 16 months.

Q. What were you doing before you went on the Rock
5058 Island?

A. I was with the Union Pacific, as yardmaster.

Q. How came you to quit the service of the Rock Island?

A. I got my hand mashed and bought out a grocery store.

Q. You have been in business in Argenta for some time?

A. I was in the grocery business until about eight or nine months ago, and then changed.

Q. When were you in the Iron Mountain service last?

A. In 1905, I think it was.

Q. Where did you go to when you quit that service?

A. To the Union Pacific.

Q. At what part of that line were you engaged?

A. For the Union Pacific?

Q. Yes?

A. At Rock Springs, Wyoming.

Q. How came you to quit the service of the Iron Mountain at that time?

A. Following a former official.

Redirect examination.

By Mr. HILL:

Q. You mean you went—

A. The trainmaster on the Valley went to the Union Pacific, and wrote for me to come out, and I followed him later, after he was there.

Witness excused.

5059 A. PAULETTE, being first duly sworn and examined, in rebuttal, testified as follows:

Direct examination.

By Mr. HILL:

Q. I wish you would please state your name, age, residence and present occupation?

A. A. Paulette, age 38, residence 610 East 14th St., Little Rock, on the police force at the present time.

Q. How much experience have you had in railroad service, and in what capacities, just state generally without going into details?

A. Figure it out since 1885.

Q. What kind of work have you done in that time?

A. In that time, I have fired an engine, I have broke as brakeman, worked as conductor, and switchman.

Q. Have you run on local and through trains on the Iron Mountain in Arkansas?

A. Yes, sir.

Q. How many years of service have you had?

A. About six or seven years as conductor.

5060 Q. About what years.

A. I was promoted in 1901.

Q. To freight conductor?

A. Yes, sir.

Q. How long did you run as freight conductor on the Iron Mountain?

A. Between five and six years, as an average.

Q. Did you serve in Arkansas since then, on any other road?

A. Yes, I worked for the Rock Island, as switchman.

Q. I want to call your attention particularly to the Iron Mountain?

A. That is where I shine on the Central Division.

Q. That is what you are familiar with?

A. I am more familiar with that than anything else, as far as road service is concerned.

Q. By the Central Division, you mean from Little Rock to Van Buren?

A. From Argenta to Van Buren.

Q. The railroads have put in an exhibit here, claiming that the local train stops eight times to once for the through train——

A. Eight times to the through train's once?

Q. What do you think of that; what is your experience about that? Before you take it up in detail, just answer whether you think that is correct?

5061 A. It is pretty near that, but that ain't all the through freights.

Q. I am talking about the average condition?

A. No, sir, it won't do it.

Q. Take some division you are familiar with, and state why you say that? Here is a station list, take that and explain the stops?

A. Of a through freight or local?

Q. I want both; take whichever is most convenient first, I want you to explain this, I don't want an extreme case either way.

A. You want the average?

Q. I want the general average conditions.

A. Just like an every day occurrence?

Q. Yes, just take that and show from that station list, the stops made, take the through train first?

A. I will make it six stops is an average on the through between Amboy and Russellville—that is Argenta, you might say; that is

not including the meeting of trains; that is just each train as you go along; you are not meeting any trains; now you have got passenger trains to contend with——

Q. Put in the meeting of trains; what would be the average stops for meeting trains?

A. You have got passenger trains to meet; you have got to stop and head in for passenger trains, and then there is your 5062 through freight that has rights over them; you have got to get out of the way of them; an east bound train has rights over the west bound.

Q. It would depend on the way you were going?

A. We are starting out of Argenta, on a through freight.

Q. You take a run out of Argenta, and call out the various stops and tell what they would be?

A. Preston for water, Gold Creek between there—either at Gold Creek or Preston for water; then at Point Remove—we call it Germantown—it is between Germantown and Point Remove.

Q. It is a water tank?

A. Yes, sir, we stop, not including the train orders in that distance, in that 75 miles, you will meet on an average about 5 or 6 or 7 trains which you have to stop for all of them going west.

Q. That will make about nine stops to Russellville?

A. It will make ten stops on a through freight.

Q. Go on from Russellville to the end of the division, to Van Buren?

A. You will stop again for water——

Q. Where?

A. Mill Creek, and you will stop for water at Clarksville, you will take coal at Coal Hill, and you will stop for water at Mulberry, and you will figure nine times out of ten, stopping for water at 5063 Ozark; there is your junction point in there on these detours—that is, a detour from Hartman around to Ozark; them junction points is just the same as a road crossing; there is a telegraph office at each end of that; there is two detours, you have got to make, two stops there in spite of everything—that is at these junction points, because you have got to stop around in that detour, to come to Spadra; that is one stop you have got to make, and you stop at Denning, and stop at Hartman, for that detour to Ozark, and when you get to Ozark get to the junction point, you have got to stop again, for there is your registering station, where you have to register, so you can know which is going over the old main line and which over the new main line——

Q. What is a registering station?

A. We register at all these junctions.

Q. Who registers?

A. The conductor.

Q. Has to stop his train and get out——

A. Yes, sir, he is not going to do it on the fly—I never did—you have to sign your name and the number of your train and engine and everything in that register.

Q. You have gotten to Ozark?

5064 A. You stop at Mulberry for water; you have got to take water, and you are sure to meet trains between Ozark and Van Buren, and if you do, you have got to stop and head in.

Have you figured up how many stops you would make in that distance, on your usual run?

A. No, I have just been talking, I haven't figured the amount of stops.

Q. I can figure it from what you say; now, take a local—before you come to that, take the run the other way?

A. Coming east, there used to be a run called 92, that was a manifest run.

Q. That is the Red Ball you mean?

A. Yes.

Q. I want you to take an average run—would a Red Ball be an average run?

A. No, because they get the benefit over the rest of them. You take an extra out of Van Buren—

Q. Would that be an average run?

A. Yes, sir, you start east, stop at Mulberry always, stop and take water going east, and then you will stop again at Coal Hill, if you go the old way, or if you go the new way, you will stop at Denning for coal always; if you go around the detour, you will stop at Denning to take coal.

5065 Q. Do you have to make the same stops at junction points going east, as you do going west?

A. Yes, sir, you have got to figure to register at these places; you stop at Denning, Mulberry, junction and Denning—that is not meeting trains at all.

Q. Go on down the road from there?

A. Then you leave Denning, you go along, and you have got to take water at Clarksville; then you take water at Hartman, there is a tank just a little beyond, Hartman, I forget what they call that place, it is just east of Hartman about half a mile; then you go to Clarksville, and take water; then you will go right along the line, and if you haven't any meeting points you will go to Mill Creek and take water, and then you will go on to Russellville, stop there,—register station—you have got to stop all trains there at Russellville, regardless of what they are; you leave Russellville,—you can figure on Morrillton being a stop—not all the time on a through freight—they might give you the white board, let you go; you are bound to get meeting points in between these places; you are coming on an extra, the man going west, of course, you have rights over him; you meet another extra freight, he is going to take the siding, you will stop—you will stop every time you meet a train—I don't

5066 know how many you will meet on the road, but it is on an average six or seven or eight trains a day, and you have to stop for very near every one of them.

Q. Going east?

A. Going east, you have a right over everything.

Q. What about passenger trains?

A. You have got to head in for them.

Q. You haven't rights over passenger trains?

A. No, sir, you have rights over extra freights going west; the time card trains, you haven't any rights over, unless they give you orders to hold the main line, and meet so and so—meet No. 77—but you have to stop to meet this one always.

Q. Go on down to Morrillton,—that was the last one.

A. Germantown, you have to take water again; that is Point Remove,—we call that Germantown,—water tank—then you go on down between Point Remove and Gleason,—you take water at Gleason, that is at the foot of the hill—you go on to Gold Hill (Creek) you take water again,—you are not meeting any trains—you may meet three or four trains between Russellville and Gold Creek—it is according to what is running on the road,—on an average, you will meet two or three trains,—regular train, passenger trains, and freight trains—you will figure on five trains anyway, counting your passenger trains coming down.

5067 Q. Where was the last point you did mention?

A. Gold Creek.

Q. From Gold Creek into Argenta,—go on?

A. There is no regular stop for a through freight, unless it is a meeting point; it is according to what time you are on the road, and whether there is any regular train coming or not; it is only three or four miles from Gold Creek to Argenta; if you have a through freight train—if you are an extra, the chances are you are going right along, unless you meet some through trains.

Q. You have mentioned meeting trains, and I suppose that is a variable quantity, varying at different times; I wish you would give what would be your experience of an average run, what would be the number of trains you would meet on a through freight, that you would have to take a siding for, between here and Van Buren?

A. Going West, you will have to take the siding for through trains, say ten trains you have to take the siding for,—all of them; going east, you don't have to, for through trains when you are coming out of Van Buren to Little Rock—Argenta..

Q. How many would you have to take sidings for?

A. Make it an average, you will meet eight or nine trains
5068 a day.

Q. By meeting, I mean trains you would have to stop for?

A. You have got to stop for them—it is either to take the siding, or you have got to stop for them.

Q. There is another question I don't know about—I suppose you do—can you meet these trains at your water stops,—can that answer for the same thing, or are they separate stops?

A. There is not a water tank between Van Buren and Little Rock that you can meet a train and take water at the same time; for instance, you take Mulberry, you are meeting a train at Mulberry; the siding is about a train length west of the water tank; you have an order to meet a train at Mulberry; you stop at Mulberry and meet your train and then pull down to the water tank, and take your water;

The Ozark tank is before you get to the siding, and the Clarks-

ville tank is beyond the siding about half a mile; and Mill Creek the water is beyond the siding; you stop at Mill Creek, you have a meeting point, you have no more rights to go beyond this east siding to go to get water,—you have got to get water—you have no rights unless you protect yours along this road, you have to protect the other train—you are making two stops to meet this train.

5069 Q. Have you allowed in that estimate of stops, you have referred to train orders; how many train orders would you usually have to stop to get, between here and Van Buren, on a through freight?

A. You will make eight or ten stops—ten stops, for orders, on an average.

Q. That is, you get orders at ten stops?

A. Yes, sir.

Q. Will you always stop for orders, or will the orders come at your stops?

A. These are special stops for orders; you can go to work—you are going west with a freight train—there is lots of places you can get your orders and still meet your train; you will pull in between the switch in the clear, and still walk back and get your orders.

Q. That would be one stop for the two of them?

A. One stop will answer two purposes; say you had a meeting point at Atkins,—you drive up in the clear; you have to meet the other train; the board is out, you can go and get the orders while you are waiting; you are making one stop answer both purposes.

Q. Take the local run—I believe that is split between here and Van Buren.

A. Split at Russellville.

5070 Q. Take the local run between here and Russellville, and say how many stops you will make?

A. You stop at every station.

Q. You have a station list before you, just count them?

A. You will make twenty regular stops.

Q. Will you have more than that twenty?

A. Yes, sir.

Q. What would they be for?

A. Meeting trains, sawing them by, heading in and unloading your merchandise,—you have got to stop, spot your merchandise cars—your merchandise is always next to your caboose—you pull up, spot your merchandise cars, and if there is any switching to be done, you cut your engine off and go to do your switching—say you are forty minutes at a station, unloading merchandise and doing the switching—

Q. That is getting onto the switching proposition; we will take that up in another connection; what I want to call your attention to, is the regular stops you would make on the local train between here and Russellville?

A. You would make more than that; there is a stop at Gold Creek, for water, besides your regular stop. Gleason spur will be

5071 another one; that is 22, and the water tank at Point Remove would be 23; you can make it on an average to Russellville on the local,—there will be 30 stops.

Q. Take from Russellville to Van Buren, on your local?

Mr. MOORE:

Q. 30 stops does not include the meeting of trains; there would be thirty regular stops for water and stations?

A. You include everything, coal and water and everything else.

Say you leave Russellville on a local, you have got to wait at Branch Junction, switch at the coal mine; Mill Creek, Cabin Creek, Clarksville and Spadra; we will take this run from Russellville to Van Buren, 24 stops—Mill Creek water tank is 25.

Q. Not including water, that is just your regular stations?

A. Mill Creek for water, and Clarksville for water—that is two, and either Hartman or Ozark, you can make one stop for either one or the other, and Mulberry, 24 stops, including the stops for water.

Q. Did you count your coal stop in there?

A. No, sir, that would be another one.

Q. Where would that be?

5072 A. Denning or Coal Hill, if you came around the old main line, or go around the detour, you will stop at Denning; there is not a man going either way, through Denning or Coal Hill, but what takes coal.

Q. That makes how many—about thirty?

A. Yes, sir.

Q. What about stopping and meeting trains?

A. You haven't met any then.

Q. Are those taken care of in these stops or are they extra stops?

A. They are all extra stops, because you can do your local work and all on the siding, and you have to take siding to meet these trains.

Q. Put it at whatever number you think would be the average amount?

A. Say you meet eight or nine trains, counting the passenger trains and all.

Q. That would make something like thirty or forty stops on the local?

A. Yes, sir, from Russellville to Van Buren.

Q. Coming this way, without taking it up in detail, would it be more or less than that?

A. It would be about the same; the only difference is, you would hold the main line instead of taking the siding and meeting trains.

5073 Q. Were you in the railroad service when they used the link and pin coupler and hand brakes?

A. Yes, sir.

Q. Were you in the service when they used automatic couplers and air brakes?

A. Before they were in it.

Q. Were you in the service afterwards?

A. Yes, sir.

Q. You are familiar with the handling of trains with both classes of equipment?

A. Yes, sir, I have handled them with part air and all air and no air at all.

Q. There is a question in this case about the damage to freight cars from stopping and starting, it is recognized that starting and stopping trains, is a cause of injury to freight cars, and there is an effort to find out how much that was.

A. In what class, in the old link and pin or what?

Q. I will get to that; where would be more damage to the car,—in which class of equipment, the old class or in the present class, from starting and stopping?

A. The old class.

Q. Why?

A. On account of more friction to the cars; you haven't got the power like you have now to stop them; you haven't got no
5074 air; the brakeman will get out and set the brakes and hold that train down; he cannot regulate his speed like a man will with air; the engineer has to pull his train up to the tank, and you have got your brakes set, and the minute he starts that train, releases it, you have the hind end tied down, and he is pulling against a solid block.

Q. You mean that causes more injury?

A. Yes, sir, say there is twenty cars in the train; out of that, you will have eight or nine brakes set with the hand brakes; when this man starts to pull up, he sees he is going to stop too quick, with the pressure he has on them cars and the draw bars ahead of them—there is that much more strain than there would be with air; if it was air, he would release the whole train and go right along.

Q. What is the difference in effect on the cars, the injuries to the cars, in switching in terminals,—that is recognized as an element of injury to cars,—what I want to know, based on your experience,—was there more injury under the old link and pin days or more under the present equipment?

A. More under the old days.

Q. Why?

A. Because them days the cars wasn't as strong as they are today, wasn't built as strong, and there was automatic couplers that
5075 they have now-a-days, that don't require as much hammering as they did before, because when you make your coupling with the link and pin, you set your pin in your links, and at that time, you hit them pretty hard, you have to, and now you don't have to; all you have to do is keep the knuckles open and they will make themselves.

Q. I believe you say you have been a freight conductor?

A. Yes, sir.

Q. Are you familiar with the method of making out wheel reports on the Iron Mountain?

A. I guess so; I have made out several of them; a few anyway—never got any of them returned to me either.

Q. There is this rule on the back of the wheel reports, I want to read you: "Cars must be reported in train order, commencing

with the caboose, to show the make-up of trains, leaving district terminals."

A. Yes, sir, leaving the terminals.

Q. Do you remember that order?

A. Yes, sir.

Q. Was it obeyed?

A. Yes, sir, I did.

Q. What in your judgment, was the usual rule of freight conductors in making up their wheel reports, did they make them up this way or not?

5076 A. They make it off your train book, just as you take the train from the caboose to the head-end.

Cross-examination.

By Mr. MOORE:

Q. What are you engaged in now?

A. I am on the police force of Little Rock; I was in this rail-roading up to the 17th of last month.

Q. Are you in night or day service?

A. Night service, I just went home and had my breakfast and came right down here, because I promised Mr. Hill to be here.

Q. Are you in the habit of drinking?

A. No, sir.

Q. Haven't you been drinking this morning?

A. I took one drink this morning before breakfast; I don't make it a habit or anything like that, but if I want one, I will go and get it; I don't think this has anything to do with this railroad business; we are not on duty at the present time,—I know I am not.

Q. How many stops does the through train make on the run between Argenta and Russellville?

5077 A. You mean meeting trains and all?

Q. Yes—first, without meeting trains?

A. If you leave out meeting trains, they only make their stops for water.

Q. How many stops do they make for water?

A. There will be Gold Creek, Germantown,—make three stops.

Q. Independent of meeting any trains?

A. Yes, sir, independent of everything; you have got to make them.

Q. How many stops does the local make between Argenta and Russellville?

A. She makes all the stations.

Q. How many?

A. You can count them out.

Q. Just count them; that is the question.

A. 23 stops without meeting a train.

Q. Does that include taking water?

A. Yes, sir, that includes water, don't include any coal, there is no coal to be taken between Argenta and Russellville; this is an average; I don't say they will make that many stops every day,—

you haven't met a train in that, and there is *lost* of trains running between Russellville and Argenta,—passenger trains especially.

5078 Q. If I understand your statement correctly, you say that there was more damage with the old link and pin equipment in starting, because there would be eight or nine brakes set?

A. On the rear end of your train, figuring on making your stop,—than with the air coupler; it is a solid chunk that you have got to pull against.

Q. And they will create a greater friction?

A. Yes, sir, because here you are,—you say you will have seven brakes set—you have got that many set—there is your train pulling against it; you are pulling against that; the engine to stop this train—the engineer seeing he is going to be too soon in making this stop, he opens up that engine to pull that train down to the water tank—what is he pulling against? He has seven or eight cars in a solid block; these other cars haven't got brakes set in them ahead of them; when he pulls that open, there is where it is hard to work; if he has air, handling the air himself, he releases this air; you haven't anything on the hind end to hold you; the whole train is released.

Q. Are you through now?

A. Yes.

Q. He is pulling against all these set brakes?

A. Yes, sir.

5079 CARL R. GRAY, recalled, testified in behalf of the complainant as follows:

Redirect examination.

By Col. MOORE:

Q. You testified that if a division of expenses of operating local and through trains were properly apportioned, that would not account for the extra cost of handling state over interstate freight: what are the elements of difference you had in mind?

Judge HILL: That is objected to as not proper at this stage of the case.

Col. MOORE:

Q. You stated on cross-examination that you would not regard the last half of 1907 as representative of the business for a period of years:

Will you explain in what respect you do not consider it representative.

A. I was covering in that particular answer the question of physical conditions, and my answer was intended to cover the
5080 physical conditions only.

Q. What physical conditions do you refer to?

A. The conditions to which I had already referred, in respect

to the distortion of any one month or any short period of time, on account of the difference between the actual movement of tonnage and the actual time in which it is taken into account.

Q. How would it be in regard to the earnings on state business under the state commission rates which were in force at that time? 'I mean as a representative period?

A. I would regard it as fairly representative in that respect.

Q. You think, then, so far as the expense of state freight is concerned, and the earnings under the rates then in force, it would be a representative period?

A. Yes, sir, that is my thought.

Q. Mr. Gray, was the automatic coupler used in the old cars?

A. The automatic coupler was placed in all the old cars in service at the time the law took effect.

Q. It has been stated in testimony in this case that the cars had been strengthened so as to require a greater power of resistance: how has it been with regard to the draft rigging?

Judge HILL: That is objected to.

Col. MOORE:

Q. Will you state what the opportunities of operating
5081 officials, including division superintendents, and thence on up to the general manager of a railroad, are for familiarizing themselves with operating conditions such as switching and other conditions of that kind, and the effect of such conditions upon the expense of equipment?

Judge HILL: That is objected to, and we also object to Mr. Gray testifying at all on any matter other than his cross-examination.

If it is competent to testify upon at all, he should be recalled after the defendants close their case.

A. An operating official, commencing with the rank of trainmaster, is in constant touch with the operation of trains on the road, and the supervision of switching at terminals. The duties and his responsibilities compel him to ride the local freight trains as well as the through freight trains, and constantly supervise the work, determine upon its necessities, pass upon its practicability and in the last analysis decide the general manner in which the work shall be conducted.

This is equally true of the terminals where a great deal of his time must necessarily be spent in the field, with all the different engines and crews; determining the manner in which they shall work; supervising the character of their service and by a proper method of statistical inquiry keep constantly posted as to the relative cost of the different terminals, comparing the same; investigating and finally passing upon the expense; and in every
5082 way directing all items of physical operation.

As he progresses his responsibilities are not lessened but his methods and avenues of information are correspondingly broadened.

It is not only his privilege, but it is his duty to keep constantly

in touch with every element that creates or affects expense, and he is of necessity the final arbiter as to the character and extent of any kind of work.

He must have, in order to be able to judge intelligently, a knowledge of all the operation of his line, or such portion of his line as he is in charge of. And that keeps him in touch with any changes in conditions which serve to affect either favorably or adversely the elements of cost.

Cross-examination.

By Judge HILL:

Q. Mr. Gray, I wish you would restate your opinion about October being a representative month: I do not quite catch your distinction there?

A. The distinction I make is that October was not a representative month to be used in the physical sense.

Q. What do you mean by "physical sense"?

A. In the application of physical statistics which are the ton miles. Because of the fact that there is so much business, so many of the ton miles, that are not taken into account—as I explained in my testimony.

Q. On your "lap-over" proposition?

5083 A. Yes, sir.

Q. That does not have anything to do with the physical conditions, as I understand it, does it?

A. The physical statistics, yes.

Q. Did I understand you to make some distinction as to physical movement?

A. The physical conditions which were found, in the way the matter was explained to me, as your arriving at the October statistics.

Q. Your whole testimony on that goes back to a still further attack on that "lap-over" proposition: that is all you mean by this, is it?

A. I do not know that I understand what you mean by "attack"?

Q. Criticism, if you prefer that word.

A. No, sir, the question was, as to what I meant by my answer.

Q. I am going back to your original answer, just what that meant.

Col. MOORE: Let Mr. Gray explain.

Judge HILL: That is what I am asking him to do.

A. My answer to the question on cross-examination, as to the month and the period not being representative, applies directly to the question of physical statistics, and my fundamental objection was that you cannot get into that period the physical conditions by taking one month.

5084 Q. That is because there would be lap-overs that would not take care of themselves from one month into the other month: that is your point?

A. Yes, sir.

Q. As I understood your answer a while ago, which is what I did

not get clearly, it was that it would be representative to measure the state freight under the commission tariff: is that what you said?

A. Yes, sir.

Q. How is that. I do not understand that.

A. For two reasons: First, because the state freight all being short haul is taken into the current month's business.

The period involved represented the high water business; and for that reason it was representative of the maximum of what could be earned by a railroad of state freight, on any basis of rates.

Q. In other words, you do not think the lap-overs would be as much on state freight as on interstate: is that your point?

A. Yes, sir.

Q. That is all there is to it?

A. I don't know anything about "that is all there is to it."

Q. I am asking you that.

A. As I understand it, that was the question.

Q. I did not understand your distinction and that is
5085 what I am trying to get. I want to know now if that is all the distinction you are making?

A. That is the distinction between the two.

Q. That would mean that the physical conditions would not have a proper relation to the revenue?

A. I don't believe I exactly understand what is meant by that question.

(Previous question read.)

A. No, sir, I would not say that.

Q. Is not that what your position would lead to?

A. No, sir. I believe that the revenue is more nearly representative than the application of physical conditions would be.

Q. Just what do you mean by that?

A. It is difficult to explain what I mean by that.

I have testified that the period, the last half of 1907, was not representative in its physical sense, with respect to a number of things:

First, the fact that the freight was delayed in that period, and would serve more to throw into one month the expense of handling business that was accounted for in another month. That is the distinction I make in the physical sense.

Now, the distinction I make as to the state traffic is, that it is a short haul traffic and is more nearly accounted for in any given period, either a month or six months' period; and in arriving at a conclusion as to the earnings upon any basis, as
5086 applied to that particular period, I would regard it as fair and if anything leaning in liberality toward showing a greater earning on the state business.

Q. That is the one month proposition you are discussing or is it the six months?

A. The one month or six months. I am discussing the question of applying physical statistics in the one case to other periods, and I have stated my objection to it.

Then in reply to the question whether I thought it was a fair criterion upon the state business I have said I did.

One is a question of arriving at comparative value of statistics. The other is a question of determining whether it is fair to use a certain period to determine earnings.

Q. And you think it is fair for earnings and not fair for expense?

A. I do not think the two bear any relation to each other.

Q. You do not think that earnings and expenses bear any relation to each other?

A. I did not say that.

I do not think my answer is inconsistent where in the one case I criticised the physical statistics and in the other where I accept as fair a period for determining known quantities.

Q. And you regard the cost as a known quantity?

A. No, sir.

5087 I am referring to the earnings on state business as a known quantity.

Q. I got the proposition backward.

The substance of your views, as I gather it, is that the physical conditions correspond to the revenue in the state business but not in the interstate?

A. No, sir, I am not testifying in that way.

Q. Is not that the result of your statement there?

A. No, sir, I do not see that that conclusion can be drawn.

The question I was asked was, whether I considered this period a fairly representative period for determining the earnings from state traffic; and my answer was that I did and if it leans in any direction it would be toward liberality in determining state earnings. And I gave as my reason for that the fact that the state earnings being short haul, and being mostly on one line, are almost invariably taken into the current month's earnings.

Q. It is a little bit of a digression here, but I will call your attention to the fact that a pretty large per cent, 12% or 15% or something like that, of the interstate business on the Iron Mountain road out of Fort Smith and Memphis has as short a haul as the interstate business.

Col. MOORE: You are mistaken about that. It is very much larger.

5088 Judge HILL: From Memphis it is somewhat larger than the other state business but not nearly so long a haul as the interstate. There is evidence here to show that that condition is true of Fort Smith. It happens that we have some furniture factories there and while the haul is not nearly so long as the interstate haul it is much longer than the average state haul.

A. I have not during any part of my testimony referred to specific conditions, because I am not familiar with them on the Iron Mountain road.

Judge HILL: You are not familiar with the Iron Mountain conditions, are you, Mr. Gray?

A. I have based my testimony on the figures which were given me as to the average haul of state and interstate business.

Q. The facts are undisputed as I have stated them to you, as I understand the proof. I cannot recall just the figure but I know I am stating them correctly, generally.

You are not familiar with conditions on the Iron Mountain road?

A. Only as I understand the conditions to be generally on that road in common with all southwestern roads.

Q. You have not performed any service on the Iron Mountain?

A. None whatever.

Q. You do not know the Iron Mountain road any better than any other competing line in your territory?

A. No, sir.

Q. You never have studied the statistics of the Iron Mountain?

A. Only as presented me in this case.

5089 H. R. V. ROSING, recalled, testified as follows:

Redirect examination.

By Col. MOORE:

Q. Will you state the number of freight cars in service on the Iron Mountain Railroad, and the cost of equipping freight cars with air brakes, including the cost of the brake and putting it in place on the car?

A. The Iron Mountain Railroad has between 19,500 and 20,000 freight cars. The number of cars varies from day to day but it will not be less than 19,500 nor more than 20,000. The cost of equipping a car with air brakes is about eighty-five dollars, which includes the cost of the air brake equipment, complete, as purchased from the manufacturer, and its application, with the necessary connections to the car.

Recross-examination.

By Judge HILL:

Q. Mr. Rosing, did not you and Mr. Roberts agree that the cost of an air brake was \$40.

A. That is the cost of the air brake parts as we got them from the manufacturer.

Q. You agreed on that?

A. Yes, sir, but that did not include its application to the car and the levers in connection with it.

Q. You are speaking now about the labor and other things?

5090 A. Yes, sir, and the appliances necessary to put the thing in the car in an operative condition.

5091 Mr. F. P. JOHNSON, recalled, testified as follows:

Cross-examination.

By Mr. HILL:

Q. Mr. Johnson, at page 884 of your testimony, speaking of maintenance of way expense you say it seems to you it is more of a general expense than any other item of the operating department:

What do you mean by "operating department" in that connection?

A. By that I mean the entire operating expenses of the railroad. Perhaps, the words "operating department" are not just quite right; but, taking the five classes of operating expenses——

Q. What are those five classes?

A. Maintenance of way; maintenance of equipment; traffic; transportation; and general expenses.

By that I mean that the maintenance of way and structures is just as much an overhead expense as any other item of the expense in that class.

5092 Q. Under maintenance of way, maintenance of equipment, traffic and general expenses?

A. Yes, sir.

Q. I just want to get your definition of the term "operating expenses" in that connection.

I believe those five classifications are the ones that are used in these exhibits?

A. Yes, sir.

Q. Is that the term to which you apply the designation "primary accounts"?

A. Yes, sir, those are the primary accounts as designated by the Interstate Commerce Commission.

Q. The reason you give for that, as I understand it, is because, the expense that is incurred this month is not taken into the account this month or next month or possibly not this year, and the traffic or the car movement has no bearing upon the amount of money which is taken into maintenance of way expense in the month in which the car movement is made.

That is your reason for reaching that opinion, as I take it?

A. Yes, sir, those are among the reasons.

Q. The fact that all of that expense is not current is not peculiar to the maintenance of way expense?

A. Well, I think it is more so than it is in any other department of the railroad expenses.

Q. There might be a question of degree, but that same proposition runs into a great many other accounts?

5093 A. It does, yes, sir.

Q. Take maintenance of equipment and a very material part of that expense is not current, is it?

A. Yes, sir, I should say a large part of it is not current.

Q. I don't suppose you have any figures on it, but you know that a very material part of it is not current, do you not?

A. Not so much so as in maintenance of way.

Now, in saying that, I have this in mind: that there was a time in the handling of the accounts of the Missouri Pacific Railroad when we would separate the repairs of equipment between what we call "ordinary repairs" and "accident repairs." Those accident repairs as a rule were of very recent occurrence and it was a large part of the maintenance of equipment expense.

Q. But you do not do that now?

A. No, sir, we have not followed that plan since 1904.

Q. Under your present system there would be a very material part of the repair account which would not be current?

A. There would be the same proportion perhaps that occurred prior to 1904, when we had those figures separated.

Q. It would be more than that, I should take it; and in your maintenance of equipment you have to allow off a certain amount for depreciation, and all above that would be current?

A. I am afraid you do not understand what I mean by that:

5094 "Ordinary repairs" were repairs that were made in ordinary course of business; repairs to the cars and the locomotives, themselves.

And "accident repairs" were abnormal repairs, due to wrecks or accidents on the road. And those were of recent occurrence.

Q. I caught your distinction. But under the present accounting system you have to allow a certain percentage, under the Interstate Commerce Commission rule, for depreciation, don't you?

A. Yes, sir.

Q. How much do you allow?

A. It is $2\frac{1}{2}\%$, 3% and 4% ; but I do not remember to what class of equipment these different percentages apply.

Q. I am not particular about the exact distribution but it is a small percentage?

A. Yes, sir, a small percentage.

Q. And a small amount?

A. Yes, sir, and a small amount.

Q. The wear and tear on equipment above that small percentage would not be current, would it? Cars wear out in the course of time, and all that sort of thing?

A. The ordinary wear and tear would perhaps be a large percentage.

Q. And that is not current any more than maintenance of way, is it?

A. No, sir.

5095 Q. Now take "traffic": is that current?

A. I should say a very large part of the traffic expense is a current expense, because it is practically all salaries.

Q. There is a part of that which would not be current, isn't there?

A. It may come under the head of stationery and printing and possibly advertising.

Q. Advertising is what I had in mind. What have you in that account—if you have it before you.

Col. MOORE: Let him finish his answer.

A. I was going to say that the advertising expense would not be more than 90 days old, because they would not let us run much longer than that.

Q. What is that?

A. It is newspaper advertising and printing bills.

Q. What I have in mind is, you have a large printing bill—I do not know how often but I do not suppose you would have that every month. You advertise the industries along the line, and all that sort of thing. Those would not be current expenses, but would run through the year?

A. No, sir, they are paid within sixty days and charged to operating expenses as paid.

Q. I understand that. But you would not have sixty days' worth of literature published at one time, would you?

A. The pamphlets, of course, we get out and we pay for them as they are printed. But we use them perhaps all that season.

5096 Q. All that year or more?

A. Yes, sir.

Q. That is the point I am making.

A. Yes, but even that is a comparatively small part of the traffic expenses.

Q. I know that, but I wanted to call your attention to the fact that there would be an item there, of more or less moment, that would not represent the current expense?

A. Oh, yes. Of course, that runs through all of the operating expenses but not nearly so much as in maintenance of way and structures.

Q. Now, take "transportation": take your casualties; I believe that comes under transportation, does it not?

A. Yes, sir, casualties come under transportation.

Q. That is heavier?

A. It is a large item in itself.

Q. There is very little of that which is current?

A. Very little.

Q. I assume there are other transportation items that are not current. Do you recall any? Say "loss and damage": do you include that as casualty?

A. We understand that "casualty" includes loss and damage to stock, injuries to persons and to stock on right-of-way.

Q. I know you have sub-divisions.

A. I have just given you the sub-divisions. Damage to
5097 stock is, of course, a current expense.

Q. I do not agree with you about that.

A. Except such claims as are in litigation.

Q. I would have to disagree with you on that, Mr. Johnson. Unless you can qualify yourself as a claim agent.

A. I have handled those claims for perhaps fifteen years.

Q. You do not mean that stock killed in October are paid for in October?

A. I mean perhaps 90% of it is paid before the end of the November accounts.

Q. It would not be current if you take any one month or a certain period?

A. If you take six months, yes.

Q. There would be the question of "lap-overs"?

A. It would be a lap-over of July and December, yes, sir.

Q. But there is no such thing as current expenses in damage to stock. You may be prompt in your payments, and I hope you are.

A. We are compelled to be in Arkansas.

Q. In the ordinary course, when you are prompt, it would be thirty to sixty days before settlement was made?

A. I would call that a prompt settlement.

Q. I am not criticising the promptness of your settlement, but I am just getting at the course of business.

A. What I have in mind is, that there is a big difference between settling claims in sixty or ninety days, and paying an expense incurred six to seven years prior.

5098 Q. Why, certainly.

A. You must bear in mind that between fifty and sixty per cent of all the operating expenses on a railroad are for salaries, which are current items.

Q. What other items do you think of right now, without going too much into detail, that are not current, beside transportation?

A. You will find it in exhibit 3, if you have that before you.

Q. At page 889 (that is Mr. Wright's statement in regard to switching) you take two runs between Little Rock and Texarkana and between Little Rock and Hoxie, and show the actual time consumed by a local and by a through train: you say you drew off the running time between Little Rock and Texarkana of a through train between those points, during the month of October, 1907, for each of the 31 days; and that the average running time of the through train was 16 hours and seven minutes and the average running time of the local train was 25 hours and 18 minutes:

How did you get at that, Mr. Johnson?

A. We had our man in charge of the wheel reports take the wheel reports themselves and take off the running time of those trains for each day in that month.

Q. And then average them?

A. Yes, sir, and then average them.

Q. Your local train there was composed of two trains, was it not?

A. Yes, sir.

5099 Q. Where were the respective runs of those two trains?

A. They break part of the time at Arkadelphia and part of the time at Malvern. We did that in order to cover the same territory that was covered by the through train.

Q. I understand that. That would make the average of each of those local runs about 12½ hours?

A. Well, that would depend upon the length of each of those runs.

Q. I said "average": Have you the actual figures of the separate runs? If so, I will put them in?

A. No, sir, I think Mr. Hamilton has that work sheet. I gave it to him the other day.

Q. I have not the work sheet but I knew from the physical situation that would necessarily be done.

A. What I mean is if the run from Little Rock to Arkadelphia was longer than the run from Arkadelphia to Texarkana, each of those runs would not average one-half of the total. You see what I mean?

Q. Yes, but I assume that break is made practically half way. That would be the usual practice.

A. The mere fact that they changed the run of those two locals would indicate there is some difference in the mileage. That change I think was made upon the 12th of that month.

Q. That would not be important to the question I want to get at. The average would be twelve hours whether one was a local and the other was a through train.

5100 A. The average between the two local runs would be.

Q. For the purpose of our inquiry it would not make any difference whether one was longer and the other shorter; the average would be that.

Take the distance between Arkadelphia and Little Rock: how much is it?

A. I have not that mileage.

Q. Haven't you a time-card there that would give it? Isn't it sixty-five miles from Little Rock to Arkadelphia?

A. Yes, sir.

Q. What would be the running time of that local train from Little Rock to Arkadelphia? How much of that 12½ hours would it consume? My recollection is that the testimony indicates that the speed is 20 miles an hour for average speed.

A. On the basis of 20 miles an hour it would be 3½ hours or 3¼ hours.

Q. What I am talking about is the run between stations?

A. Yes, sir, and the testimony in the case as to that running time.

Q. That would leave how much time of that 12½ hours?

A. It would leave 9¼ hours.

Q. Take your 9¼ hours and I think the evidence is that the switching is usually about five miles an hour. If you spend all that 9¼ hours switching how would that be?

A. Oh, I—

Q. You know, as a matter of fact, all of that time could
5101 not be spent in switching. You know that not only from your own observation but from what you have heard about the delays to the local train, waiting for orders, lay-outs, spotting cars, unloading merchandise and so on?

A. Yes, sir.

Q. You know that probably a large proportion of that 9¼ hours would not be spent in switching?

A. I would not say how much. Part of it would be spent in duties other than switching.

Q. And you know, without going into the figures, that it would be a large part?

A. Yes, sir.

Q. Now, take the next run there from Arkadelphia to Texarkana.

Col. MOORE: It would be variable, depending upon the conditions of traffic from day to day?

A. Yes, sir.

Judge HILL: Take the other run and make a similar calculation—the run from Arkadelphia down to Texarkana.

A. The distance is eighty miles and at twenty miles an hour the running time would be four hours; and that would leave eight and one-half hours. If all of that was employed in switching it would leave forty-two miles for switching.

Q. And you know a material part of that would have to be reduced for causes other than switching?

A. Yes, sir.

Q. Make your calculation on the basis you have made it, 5102 comparing your through with your local—sixteen hours against the twenty-five hours?

A. Those two local trains from Little Rock to Texarkana are making eighteen hours in switching service, according to this calculation.

Q. No, sir, according to your calculation here they are making nine hours. I am assuming that the local and through time on the road is the same. I think that is the testimony in the case?

A. You have a distance there of 145 miles for those two local trains at twenty miles an hour they consume seven hours in running time; that leaves eighteen hours for switching.

Q. Yes, that is breaking them up into two locals. But here is the point: The through train has made that run in sixteen hours. I understand from the testimony in this case—the testimony in behalf of the railroad at least, that the through train does not do any switching and that represents its running time. And I understand from the testimony in the case that aside from the stops of the local trains that it runs as fast or faster on the road than the through train. You so understand that?

A. Yes, sir.

Q. If it takes the through train sixteen hours to make its run from Little Rock to Texarkana, and takes the local train sixteen hours to make its run, exclusive of stops for switching and other purposes, that is nine hours excess, is it not?

A. Yes, sir.

5103 Q. That nine hours at five miles an hour would represent forty-five miles, if all that time was consumed in switching?

A. Yes, sir.

Q. And that forty-five miles would be what per cent of the 145 miles?

A. That would be about 30%.

All I intended to do was to explain that I did not give this illustration to show the amount of switching performed by a local train.

The testimony in this case that was presented by the state, by more than one witness, stated that the difference between the schedule time of trains was an indication of the amount of time that was put in by that local train in switching.

Now, I do not believe that the schedule time has anything to do with it. If the time of the trains is any indication of the amount of switching, it ought to be compared with the actual running time.

Q. I have accepted your basis and am making the comparison on your basis.

A. What I mean is, that I have not stated in my testimony that the timecard is any indication of the amount of time consumed in switching.

Q. If you recall the testimony put in by Mr. Wright, he simply stated it was the opinion of the men on the road that that
5104 would be the time consumed in switching, comparing the local and the through train?

A. I do not believe the time card has anything to do with it.

Q. I do not believe Mr. Wright said it had, but he said that the opinion of the men who got out the time-cards had something to do with it. But that is a matter of evidence. That other would run out practically the same way, wouldn't it?

A. Yes, sir.

Q. I will not take the time to make the calculation.

Turn to your testimony at page 892. You say that your traffic expenses are apportioned between states on the basis of the gross earnings and not the train mileage; and you quote from page four of the state's exhibit:

"The amount apportioned to the state of Arkansas is based on the revenue train mileage in that state as compared with the revenue train mileage on the whole road"

and you call attention to an apparent discrepancy there:

I wish you would turn to your exhibit and see if it is not a fact that the state has used your revenue figures:

I will state by way of explanation, that that is a typographical error in the state's exhibit, in copying it. Mr. Kimbell and you differed as to that basis of division. Your figures were made up according to your way and Mr. Kimbell's figures were made up according to his way. In copying the state's exhibit the typewriter
copied the one figure when the other figure should have
5105 been used.

A. That is a typographical error in your exhibit.

Q. There is no error in the figures.

A. No, sir, there is an error in the reading matter in the exhibit.

Q. The reading matter in your exhibit is true as applied to the Cotton Belt?

A. Yes, sir.

Q. But the figures in the state's exhibit are correct?

A. The figures are correct.

Q. You are not questioning that?

A. No, sir, I am merely questioning the statement in the exhibit.

Q. Some of these copies have the figures and statements correct and some have not. It was simply an error in copying.

A. That is all I intended to call attention to—that the reading matter itself was wrong.

Q. But the figures are right?

A. Yes, sir.

Q. And use your basis as you claim it should be?

A. Yes, sir.

Q. At page 890-a here is Mr. Moore's question:

"Q. Mr. Hillman testified that the cost of yard service should be ascertained directly as between state and interstate on the basis of the tons instead of dividing that item between local and through trains."

Then he asked you what effect upon the result in the figures produced by the state here would such a division as that have, if divided in the manner suggested by that witness. And then you answered that in amounts.

5106 Did you understand Mr. Hillman's testimony that he said it should be ascertained directly between state and interstate, instead of dividing that item between local and through trains?

A. Yes, sir. My understanding of Mr. Hillman's testimony is that he would not divide that expense between local and through trains but divide it direct between state and interstate, either on a car basis or a ton basis.

Q. I will call your attention to the testimony of Mr. Hillman appearing at pages, 1566, 1567, 1576, 1577 and at pages 1609 to 1611 inclusive, which are as follows:

"Q. Now, Mr. Hillman, I wish you would take up this "Maintenance of equipment"; that seems to be the proposition that our friends on the other side are criticising very much. I would be very glad to have you go through that with some detail.

A. On this "Maintenance of equipment" I find that the accountants for the state have first taken the expenses and divided them between yard, local trains and through trains.

This method of handling it altogether, with their percentages which they have added to each of those, is, to be a little trite, a "new one on us."

I had made the division of those accounts recognizing the switching but dividing the switching in the freight on the basis of the handling, counting it on the tons.

I had divided the rest of the expenses which are the road expenses, on the basis of the ton miles. I was anxious to see how that would pan out here and with the information I have, I ran that up. I find they charge on this basis to intra, in the neighborhood of \$76,000 for those "maintenance of equipment" items, included in locomotives and car repairs.

In my basis it amounts to a trifle over \$73,000.

Q. A difference of how much?

A. A difference of \$3,000, or approximately 5%, between the two methods.

Q. Our accountants were——

A. Your accountants' figures were higher than those that I would have placed had I been making the division.

I was very anxious to see how this would come out, as it struck me that they had allowed very liberally for the extra expense incurred by the damage done by yard locomotives to the equipment in the switching process. They have made a further allowance for extra switching done by locomotives on local trains, amounting to 75%. This is quite heavy, and in my opinion, it is a very liberal allowance to this factor.

Q. It is in evidence here that they attempted to take the maximum on all of these allowances that are shown in this head, and I will ask you if in your judgment that is true, that they were high enough to be the maximum for these various items?

A. Yes, sir, I should say they are. I would further say that I have considered in the matter of allowing the switching, in my own division, upon the ton basis, that I was giving an allowance to the contentions of the railway companies, and I have always felt in doing that that I wanted to place my figures beyond criticism and have therefore made that allowance on the ton basis. In doing so, of course, we ignore to a great extent the fact of switching of interstate tons at terminals, in making that division, but I think it is the best factor that we can get, unless we absolutely take the cars and their loading, which are switched at a terminal, and then apply that switching over the average length of haul, the ton mile basis, which would be almost an impossible work to pick out after you have gone over an account. It could be kept at the time."

And on pages 1576 and 1577:

"Q. The next item is yard and terminal expenses, divided between local and through business on the basis of the number of cars handled at terminals; are you familiar with that method and that factor of reaching that item of expense?

A. Yes, sir, I have not always gone into that detail. I am doing it now in one case that I have on hand, but I have not always gone into that detail where I have not had that factor; I have divided that, as I stated before, upon the ton basis.

Q. Which is the nearest factor, in your judgment?

A. The handling of cars at terminal stations, switching at stations, is undoubtedly the factor to be taken into consideration.

Q. When you cannot get that, you take the next best, as you have in some instances?

A. It really is not necessary to go into that much detail.

Q. The next item here is fuel and expenses; that matter was handled in this way, on the Iron Mountain; they took the fuel that was ascertained by a test made by the Cotton Belt Railroad, and the gentleman who had been general manager of both railroads, said that the fuel conditions should be practically the same upon those, and they have applied the factors obtained in the Cotton

5108 Belt test to the Iron Mountain in the absence of any data from which they could get the actual fuel consumption.

What is your opinion of the proper way to divide that expense, or the way it has been divided?

A. The way that it has been divided seems to us to be proper. Of course, it depends to a certain extent, upon whether the conditions between the two roads were on an equality; if there is testimony to that effect on file, it should receive its confirmation, as far as that test only goes to confirm it.

Q. If you were confronted with a statement made by a witness introduced by the carriers, who had been general manager of both of the railroads in controversy, that that was a fact, would you feel justified in using his figures?

Question objected to and not pressed.

A. I would say further, that in the absence of the testimony of the character of which I have spoken, I have taken that consumption of fuel on the straight engine mile basis, as between the local and the through trains; I mean by that, when I have not that percentage available I have taken it on the straight engine mile basis."

And on pages 1609, 1610, 1611:

"Q. I believe you stated this morning you used tons as a basis of dividing yard expenses between state and interstate; would it not be better to use that unit there, than to make the division between local and through trains on the car mile basis, and then divide between state and interstate on the ton mile basis, wouldn't it be a more direct way of arriving at the result?

A. I would not like to say that it would be the better way of doing it; it is a method I have pursued heretofore myself, in handling those expenses.

Q. I take it you pursued the method you thought the best?

A. I pursued it because my attention had not been called to this method of handling; I think I stated when I went over it, that it was a new one to me, that it received attention from me as to how it bears out, and it looks very fair on the face of it.

Q. Assuming if your plan is the proper plan, wouldn't it be better to divide the car expenses, I mean the expenses on the basis of the cars, between state and interstate, rather than to divide it between local and through trains, and then on the basis of ton miles between state and interstate, as far as it could be done?

A. I think that the absolute car basis of the handling of the cars would be the best, and if my recollection serves me, that is the way the accountants for the state have taken it up.

Q. If you will turn to page 4 of Exhibit K, you will find that the yard and terminal expense is divided between local and through business on the basis of the number of cars handled at terminals, that assumes, as I understand it, a division between local
5109 and through trains, that is the way it is divided between local and through trains; after that is done, then this expense is divided between state and interstate business on the ton mile

basis. Now, what I want to ask you is, what is the use—is there any good reason for dividing that expense between state and interstate business upon a ton mile basis, where it is practicable, in so far as it is practical to divide it on the basis of the cars in which the freight is handled?

A. Offhand, without, as I have stated, going into this matter further, as I wish to do, I should say that I would prefer to accrue the switching cost upon the cars at the terminal, and after that amount of money had been determined, I would, then, of course, distribute it by the ton mile basis to state and interstate, as that would be the factor, or you might say, not the factor, but the term in which I would express costs. I would not base the costs on the ton mile, but after I had the cost of this ton and all other expenses, I would then express that in a cost per ton mile.

Q. You would make your division on the car basis?

A. Yes, sir, I think I would, as I see it now, without going further and comparing it further, I think I should fasten it on the car or ton.

Q. The state's accountants, in the exhibits in this case, have divided a large part of the train expenses of the expenses, I mean of trains—on the car mile basis, and in doing that, the car is a car without regard to its contents, whether it is empty or loaded; if it is loaded, without regard to the weight of the load. Now, what is your view as to the proper method of dividing that character of expense between freight and passenger cars?

A. That is, the expense of switching?

Q. Yes, the maintenance of way and structures and equipment, all that sort of thing, I am speaking now of these large divisions, maintenance of way and structures, maintenance of equipment, and that character of expense which is divided on a car mile basis as between local and through trains; what in your judgment would be the better way of dividing that between passenger and freight—I speak of the car itself?

A. The car mile or the car basis, and terminal car basis, as set up here, and dividing it by the ton mile would not enter into the division between freight and passenger."

Q. Mr. Johnson, is this the testimony you had in mind in using this basis and in making your Exhibit 56?

A. Yes, sir, so far as the division of yard and terminal expense is concerned, and particularly his testimony at pages 1609 5110 and 1610.

Q. You also used that on the basis of Mr. Hillman's testimony in making your division of repair to yard engines in your exhibit 56, in paragraph 1-a?

A. I did not make that division in the repairs to yard locomotives on account of any testimony that Mr. Hillman gave on that particular account. I think in my testimony I merely referred to what Mr. Hillman testified to as to what he would do in dividing his yard and terminal expenses. Now, then, the repairs to yard locomotives is an entirely different item.

Q. You made it on the same basis?

A. Yes, sir.

Q. My question was, were you doing it with Mr. Hillman as your support for so doing?

A. No, sir.

Q. At page 1566 of Mr. Hillman's testimony there is one paragraph where he stated:

"I had made the division of those accounts recognizing the switching but dividing the switching in the freight on the basis of the handling, counting it on the tons. I had divided the rest of the expenses which are the road expenses, on the basis of the ton miles."

Then he states further: that making his division that way and comparing it with the division made by the state on some items, there is only \$3,000 difference between his division and that of the state.

If I understand your exhibit 56 you use Mr. Hillman's basis for the tons for switching but do not use his basis for the ton
5111 miles for the remainder of the expenses in making that division: isn't that true?

A. By "remainder of the expenses" you mean yard and terminal expenses?

Q. My question is, what Mr. Hillman was referring to.

A. Exhibit 56 was not made up on the basis of any testimony that Mr. Hillman gave, to the exclusion of the testimony of every other witness.

I merely called attention to what Mr. Hillman said in regard to this particular item. There were other witnesses who testified that the yard and terminal expenses should be divided on the basis of tons handled rather than between local and through trains on the basis of the number of cars.

Q. You referred in your testimony to what Mr. Hillman said in regard your attention, to Mr. Hillman as your authority. And I am now calling your attention to the fact that you accept Mr. Hillman as authority on the tons in the yard and terminal service but do not accept Mr. Hillman as authority on the balance of that same account; and I ask you if that is not a fact?

A. I would not put it that way. I have not used Mr. Hillman as an authority for anything.

Q. Mr. Moore's question here, as I understand it, implies that (page 890). Your answer was that you thought that was correct.

A. I do not see any connection with that in stating that I thought
5112 Mr. Hillman was correct. Mr. Moore asked me what the effect of applying Mr. Hillman's basis to the figures would be and I told him.

Q. And that is the basis you used on the tons, but you did not follow Mr. Hillman when he used ton miles on the balance of the expenses in that account?

A. No, sir, I followed in the balance of the account quite a number of other witnesses.

Q. While we are on that point of handling cars in terminals and repairs of yard locomotives, on the tons instead of the car basis, you would necessarily assume there that the haul of intrastate freight

of 72 miles would occasion the same handling as the haul of 218 miles of through freight, wouldn't you?

A. Yes, sir. This basis assumes that a ton of state freight with an average haul of 70 miles receives the same service as a ton of interstate or trans-state freight with a haul of 218 miles.

Q. When you take those tons you derive your statistics from your exhibit 26, do you not?

A. Yes, sir, that would be from Exhibit 26, the month of October, 1907.

Q. Then your figures based on that would have this vice of the lap-overs in it, would it not?

A. Yes, sir, just the same as any other calculation made on the month of October would have it.

Q. And all the horrible results that would follow from that lap-over feature would run into your exhibit as well as in the state exhibits?

A. Yes, sir, this exhibit is built on the same plan as the 5113 state's exhibit, changing the arbitraries and changing the factors for division.

Q. Is not the state exhibit also based on the wheel report, while your exhibit is based on the auditor's report?

A. Yes, sir.

Q. The state's exhibit would be freer from the lap-overs than yours, according to the testimony which has been given here, would it not?

A. So far as the car mile basis is concerned, of course there would be no lap-overs.

Q. But according to the basis you used there would be?

A. On the tons there would be lap-overs.

Q. And according to the state's plan there would not be any in this item?

A. No, sir, so far as the actual percentages are concerned, based on car mileage.

Q. On page 893 under the heading of "Other train expenses" you criticise the use of the train mile as a factor to divide those other train expenses: I will ask you if the state had used the car mile basis there, instead of the train mile, if it would not have been much more favorable to the state? And I will call your attention to Exhibit I on page 1 where you will find (leaving out the fractions) that if the car mile basis had been used there the result would have been fifteen, whereas by using the train miles it is twenty-six against the local train?

5114 A. Yes, sir, the percentage of train miles is larger than the percentage of car mile.

Q. The use by the state of the train mile in that instance operated to the advantage ultimately of the interstate expenses, did it not?

A. So far as those two bases are concerned, yes.

Q. At page 893 you state:

"And so far as the greater part of the damage to stock, wrecks, injuries to persons, are concerned, that expense could have been

located either to the local train or the through train with the same degree of exactness as the loss and damage to freight was."

How are you going to locate stock killed, to the local train?

A. The stock claims that are presented will show the point of damage, the train number and class, as well as the names of all the trainmen on that train. There are cases where stock is killed by an unknown train.

Q. A great part of the stock killed at night, they do not know by what train it was killed?

A. I would not say that, because the train crew itself makes report when it kills or damages stock.

Q. We know as a matter of common knowledge that a great deal of stock is killed at night, where the train crew does not know who killed or damaged the stock; is not that a fact?

A. It depends on what you call "a great amount."

Q. I know only what I learn about it in the law courts.

A. It is so definitely known that we used to divide it between freight and passenger trains.

Q. You do not do that now?

A. No, sir.

Q. Suppose you had a head-end collision between a local train and a through train, how are you going to divide and locate that?

A. How am I going to do it?

Q. You said you could locate it between the local and the through train?

A. I said we could locate a large part of the expense of damage to stock and a large part of the injuries to persons.

Q. As a matter of fact is not that more of a train expense than a car expense?

A. What?

Q. Killing stock and injuring people; it is done by the train as an entity and not by the individual car; is not that the logic of it?

A. That is true. But I do not believe the train mileage is the proper basis to divide the expense between the two classes of expense, when you are trying to get the cost of state and interstate.

Q. Isn't it a fact that the mileage is better than any other factor, where a certain amount of injury takes place in the operation of a railroad?

A. I can answer that better by saying that neither the car mile nor the train mile would take care of loss and damage in transit.

5116 Q. But the train mile is evidently a more logical unit to use there than the car mile, is it not?

A. Yes, sir, than the car mile.

Q. Now, speaking of those injuries there; those are all questions of lap-overs, but we have discussed that.

At page 894 you say, in discussing the allocation of expense in the state's exhibit of wages paid to train crews and you say that was taken from your time books; and then occurs this statement:

"The only difference between that method and an exact amount would be the question of overtime on the last two or three days of each month that might not get into our time books."

Wouldn't it be pretty bad bookkeeping if you did not have all your wages both straight time and overtime, properly charged to each month?

A. That is a mistake there on the question of overtime.

What I should have said is, that the exact amount would be the question of the time for the last two or three days of each month.

Q. Even taking it that way, would not that be had bookkeeping if you did not have the October time in your October accounts? It might be on account of an accident or sickness that a man's time was not sent in, but when it did come in would it not be properly charged to October?

A. No, sir.

Q. It would not?

5117 A. No, sir. And I should say there are a great number of runs on the Iron Mountain and the Missouri Pacific where the last day and possibly the last two days are carried over into the next month, because we do not get the time slips.

Q. You do not get those before you close your October accounts?

A. No, sir, we do not get those before we close our payrolls.

Q. I am speaking of October?

A. Yes, sir.

Q. Isn't it a fact that in this case—and did not you and Mr. Hamilton go through that and in a few instances, perhaps some half dozen instances, where you did not have an engineer's time or the fireman's time, you took the time of the other one and made the calculation so as to make that correctly. You took either the engineer's time or the conductor's time?

A. I do not know what Mr. Hamilton did to adjust that, but I do know that in going over those time books, we found a number of cases where the last two days of the train crew were not carried into the October account and that there were always one or two days in September carried forward into that October account.

Q. Don't you know those lap-overs to October were adjusted in that October exhibit for the state?

A. No, sir, I do not know that.

5118 Q. On page 894, Mr. Johnson, in discussing the principle of charging general expenses when the proportion of expense has been ascertained, you say:

"I do not believe the amount of money that is expended in the operation of a railroad say for expenses in the transportation department has anything to do with the cost of operating our general offices."

Have you not reversed the proposition there, Mr. Johnson? The question of spreading into transportation the expense of general offices, and not the other way?

A. No, sir, I don't believe I have. Your exhibit divides the total general expenses between local trains and through trains on the basis of the cost ascertained for each of those classes of trains in the other general accounts. I don't believe that is the proper way to do it.

Q. I understand that. But have you stated that proposition cor-

rectly there? You stated it, as I understand it, that the transportation expense would be put into the general expenses: you do not mean that?

A. No, sir, I do not. I say "the amount of money that is expended in the operation of a railroad, say for expenses in the transportation department has nothing to do with the cost of operating our general offices or has nothing to do with the general expenses."

Q. According to this method of dividing it, no part of the operating expenses go into the general expenses, do they? That is, no part of the transportation expenses?

A. No, sir.

5119 Q. Part of the general expenses go into the transportation?

A. I do not understand that either.

There are five classes of operating expenses; "general expenses" is one of those five classes; "transportation expenses" is another class. They are independent of each other.

Q. Certainly. But this answer (indicating record) would seem to leave the impression—or it did on my mind—that you are objecting to putting any operating expenses into general expenses: you did not mean that?

A. No, sir, but I am objecting to your plan of dividing general expenses in the exact proportion of the transportation expenses.

Q. You do not think any part of the president's salary should go into transportation expenses, or that any part of it applies to transportation?

A. It applies to transportation in a very general way, and I do not think you ought to divide the president's salary between local trains and through trains upon exactly the same percentages you found obtained in these transportation expenses because he has too many other duties to perform that do not depend upon the movement of trains.

Q. It just bears its proper proportion, does it not?

A. Its proper proportion to what?

Q. Its proper proportion to the other expenses?

A. I do not see just exactly what you mean by that.

What I mean is this: the trainmaster himself is employed
5120 in the operating of trains exclusively, as he is operating both local and through trains. Now, you have divided that. That together with other expenses in the transportation department, all added together, form a percentage and you have used that percentage upon which to divide the president's salary as between local and through trains.

Q. Don't you think the president has some duty with regard to running local and through trains?

A. Oh, yes. But I do not think his salary should be divided in the same proportion as the other actual operating officials' salaries and expenses are divided.

Q. Does not the Legal Department have duties reaching to every department of the railroad business?

A. Yes, sir.

Q. Maintenance of way, maintenance of equipment, transportation, traffic and everything else?

A. Yes, sir, and to the revenue as well.

Q. The Legal Department is very general, isn't it?

A. Yes, sir.

Q. Your Claims Department runs into every branch of business, does it not?

A. What do you mean by that?

Q. Don't you have claims that are handled by that department, growing out of Maintenance of way, maintenance of equipment, out of traffic and so on?

A. Yes, sir, but by no means in equal proportions.

5121 Q. Have you any way of finding out what proportion the claim department works, how much of it is in one department and how much in another?

A. Why, certainly. The claims themselves are charged to different accounts. For instance, there is a personal injury account in each one of these three primary accounts.

Q. The Claim Department has charge of all of it and runs it into each of the various branches and apportion- it according to where the claim arises—in which particular branch it arises?

A. To the department upon which the responsibility for incurring that expense rests. But not in equal proportions.

The claims in the maintenance of way, for instance, are very small as compared with other departments.

Q. There could not be any distribution of this that would really reflect the actual conditions, I take it. Suppose a passenger was injured on account of a defective rail: where would that claim go?

A. If a passenger on a train was injured on account of a defective rail, it would be charged to the transportation department.

Q. The maintenance of way department caused that injury yet it would be handled in the claims department through the transportation department?

A. I don't know whether maintenance of way caused that injury. We have had testimony here that shows that the
5122 Transportation Department injures the way and structures to a large extent.

Q. But it goes to a large proportion to defects in maintenance of way such as low joints, weakness of bridges and so on?

A. Yes, sir, and the expense of pounding on that track goes into another account.

Q. You criticize the state's plan of utilizing the October percentages by making them conform to the six months percentages in making up their exhibits: isn't it a fact that in these statistics the traffic expenses for six months are used instead of the month of October?

A. Yes, sir, the traffic expenses are divided between state and interstate on the basis of the gross earnings for six months.

Q. And station expenses the same way, aren't they?

A. Yes, sir, the station expenses are divided on six months' time.

Q. The only adjustment, as you referred to it in your testimony,

of the percentages of October to conform to the six months, is the ton mile, isn't it?

A. The ton miles that are used as the basis for dividing the local train and through train expenses.

Q. You referred generally to "Adjusting", as you call it, the percentages: did that refer only to ton miles?

A. It is just paragraph seven of your Exhibit K.

5123 Q. I think that is correct, but I think your testimony was a little broader than you intended to make it.

If they had not adjusted the ton miles to the six months period they would have had a constructive mileage in there instead of an actual mileage, would they not?

A. They would be no worse off than they are in either basis, they have used the six months' ton mileage on one month's percents.

Q. They have adjusted the ton miles to conform to the actual ton miles, instead of applying it on six months; instead of having a lot constructive mileage there that would not be actual?

A. They have done this: they have adjusted the six months' mileage to conform to the statistics of October, without taking into consideration any change that might have occurred and a change of one or two percent might have made a material change in that percentage.

Q. But if they had not done that they might have had a lot of constructive mileage in there. They would not have represented the actual conditions during the six months, would they?

A. I don't know, nor does anyone else.

Q. It would not be the same percentage?

A. No, sir, it would be 28.51% instead of 26%.

Q. And that difference of percentage would have represented a constructive mileage if they had not adjusted it to the
5124 actual ton miles, wouldn't it?

A. No, sir, it would not have represented a constructive mileage but it would have represented the proportions of state and interstate freight in October, 1907.

In November, 1907, that proportion may run thirty and seventy; or may run twenty-five and seventy-five. I do not see that the total ton miles for the six months would have anything to do with that October percentage.

Q. If they seek to make October representative of the entire six months' period they would necessarily have to take the six months' ton mileage to do so?

A. That is what they have done.

Q. I say if they assume October is representative of that entire six months' period, they would have to do that?

A. They have done that. They have assumed that the proportions ascertained in October, 1907, were exactly the same on local and through trains for the entire six months as they were for the month of October.

Q. And if October, 1907, fairly represents that six months' period, that was a fair way to do it?

A. I don't think so.

Q. You see from that, it is the theory upon which they proceeded?

A. I know that is their theory.

Q. You disagree with the theory, but what I want to get here is, that you are not disagreeing with the figures but with their theory?

A. It is the theory they adopt which I criticise.

5125 Q. Your testimony would rather leave the impression you disagree with their method of calculation. I want to make clear it is their theory of using the figures of October instead of for the six months that you are objecting to: is that correct?

A. Yes, sir.

5126 Q. On page 899, you criticise the division of "Miscellaneous" revenue, between state and interstate.

In your exhibit I understood you took the position that that could not be divided, so you just cut it out; cut out the property and the percentage representing that?

A. Yes, and the expense.

Q. What is that?

A. The expense as well as the property.

Q. The same proportion for the expense and for the property?

A. Yes, sir.

Q. You treated that like you did "mail and express"?

A. Yes, sir.

Q. Upon the State's plan of dividing the expense it was necessary for them to find some basis to divide that revenue, was it not?

A. Upon the State's method of ascertaining the cost of state and interstate freight you had to divide "Miscellaneous" earnings upon some arbitrary basis in order to take care of all of the operating expenses.

Q. By "arbitrary" you mean something other than actual, whether a proper factor or not; that would be a matter of discussion. They had to take some factor to divide that in order to get the expense that necessarily went into every account?

A. Yes, and an arbitrary factor, at that.

5127 Q. It was divided on the revenue basis, dividing revenue by revenue, and as I understand you, the revenue basis would be an arbitrary one?

A. For that purpose, yes.

Q. According to your basis, then, it would cost just as much to collect this \$55,000 of Miscellaneous Rent as it would to earn a dollar in the first place, would it not?

You have an item of \$55,000 "Miscellaneous Rents": according to your theory it would cost just as much to collect that \$55,000, dollar for dollar, as it would to earn a dollar in the freight business?

A. No, sir.

Q. Why?

A. Because by adding to the percentage of extra cost of state freight, you have reduced the cost of your miscellaneous earnings.

Q. But your distribution is made before you add your arbitrary to the cost?

A. No, sir.

Q. It is not? You add your extra cost before you distribute?

A. Certainly.

Q. It would cost, then, as much to collect a dollar in through freight business, mail or express, as it would to collect these rents?

A. I think you have that mixed. Not as through freight and mail and express. They are entirely two different things.

5128 It would cost just as much to collect a dollar of these rents, as it would to earn a dollar of interstate freight; or, in the case of passenger, as it would to earn a dollar in interstate passenger.

Q. Or a dollar in mail?

A. Or a dollar in "mail" or "express".

Q. That is your method?

A. That is the result of our method. I would like to make that as plain as I can, too. That so far as the passenger business is concerned, these "miscellaneous" earnings are merged with our "mail" and "express" earnings, and we assume that it costs just as much to earn a dollar in "mail and express" as it does in the "miscellaneous" earnings, as compared with the State's method of making this profit as against "mail and express".

Q. On page 901 you say (referring to "mail and express" traffic): "If the state is attempting to adopt bases that will come nearest to reflecting the actual expenses, then the revenue basis, which includes over 19% of mail and express earnings, is not the proper basis on which to divide this \$53,000."

Are you not rather going back on the revenue basis, Mr. Johnson?

A. You are speaking now of "traffic expenses"?

Q. Yes.

A. My idea about that is this: that you are attempting, or the state is attempting to get at an actual basis that will reflect
5129 the cost of earning a dollar, in each class of service and as between local and through trains, state and interstate business. I do not believe that they have any right, when they are dividing the "traffic" expenses upon a revenue basis to include the "mail and express" earnings in that, and in saying that I do not believe we are discrediting our own exhibits in any way.

Q. I infer from that, that you do not think "traffic expenses" ought to be distributed over "mail and express"?

A. I don't think so if you are going to undertake to separate each item of expense. I do not believe, in the first place, that you can separate each item, but if you can obtain any basis that will do it, why, then, you have adopted the wrong basis in dividing your "traffic" expenses.

Q. I believe you have testified heretofore that you think the intrastate business ought to bear its revenue proportion of that "traffic" expense?

A. Yes, in connection with all other operating expenses, when you divide it on a revenue basis, because I believe that this is the only basis you can adopt for all of these accounts.

Q. I want to call your attention to the testimony of Mr. Ward, on page 685:

"Quite a number of witnesses (I cannot recall them all) have testified that it was proper on the theory that these agencies build up the country and induced the business into the country, and that

any agency which would tend to build up the country and build up the traffic on the road generally, would indirectly redound to the benefit of the intrastate traffic. I believe that this is about the theory upon which the state is charged with a proportion of that expense. If that theory is true should not the mail and express also be charged with a proportion of it on the same theory?

A. It seems to me the point is a very small one. I would not personally think very much of the expense should be charged to the intrastate business.

Q. That is the position we took, but this gentleman converted us to the proposition of "laying up treasures in heaven"—or Arkansas—and we felt that on that theory they should be charged with their proper proportion.

A. That is true, in a general way; but I think it is a pretty fine point.

Q. I think so. But if you are going to accept that fine point, you should apply it to mail and express as well as to intrastate traffic, don't you think so?

A. Yes, sir, it seems to me so."

Do you agree with that view of Mr. Ward?

A. No, sir; I believe this, Judge: I don't think that Mr. Ward was thoroughly familiar with the items of expense that entered into this traffic account. I feel sure that there is not a part that is charged to "traffic" expenses, that was incurred by the railroad in the earning of its "mail and express" revenue.

Q. Mr. Johnson, don't you think that a general manager of a railroad is familiar with all of the details of operation, and of all parts of the railroad that is under his jurisdiction?

A. Yes, sir.

Q. Don't you think Mr. Ward is thoroughly familiar with all parts of a railroad?

A. No, I don't believe that Mr. Ward is familiar with the amount of money that is charged to each individual expense account. I think he has too many other duties to perform.

Q. You think you and our switchman and master mechanic at Little Rock, are in accord?

A. That is not a fair view to take of it. The testimony in this case shows that in the first place, these accounts are not strictly Interstate Commerce accounts, and if Mr. Ward is operating the Burlington Railroad (as I know he is) on the basis of the Interstate Commerce classification, then he could not be familiar with them.

Q. You had some criticism of the train auditor's expense on passenger trains: you say that ought to be taken out of "general expense" and charged up to the passenger transportation, I believe: is not that the way you did it in your exhibit?

A. We have the train auditor's expense in our general expenses. Now, then, for the purpose of this exhibit, I think the state should have taken the train auditor's expense out of "general expenses" and divided that upon a different basis from the balance of the "general

expense," because in the first place, this is not a "general expense" item.

Q. That is what I want to talk about. You carried it in your books as a "general expense" item in 1907?

A. We used to, prior to July 1, 1907.

Q. And the Interstate Commerce Commission made a change?

A. Yes. The reason we did that was because our train auditors are entirely under the supervision of the General Auditor of the railroad company, and he felt that it ought to go in with the rest of his expenses.

Q. And you carried it that way: it was the judgment of
5132 your Company—up until the time the Interstate Commerce Commission required it to be otherwise—to put those items in "General Expense?"

A. Yes, sir.

Q. And your exhibits in this case carried them in "General Expense?"

A. Yes, sir.

Q. What are the duties of the passenger train auditors?

A. To collect the tickets and the cash fares on the train.

Q. He has no regular run, has he?

A. His runs are changed about every six weeks or two months.

Q. He is just sent from one part of the system to the other, is he not?

A. Just on part of it, every six weeks or two months.

Q. Then you haven't auditors for every run?

A. We had auditors for every run on the Iron Mountain in 1907, I think up to some time in December, when they were reduced. I may be mistaken about that, but we tried to cover every run.

Q. I do not know the dates, but I think I can state this, that you will probably agree with: when you first put on train auditors you put them on every run, did you not; when that system first went into vogue you attempted to put them on every run?

5133 A. Yes, on the Iron Mountain.

Q. And then you got to discontinuing runs and cutting down your force and transferring them from one run to another?

A. Our policy has always been to transfer them periodically, but we did not undertake to reduce any of them until the depression in December, 1907. As a matter of fact, our policy has been to constantly increase them, and on the Missouri Pacific——

Q. Is that expense pooled with the Missouri Pacific expense?

A. The train auditor's salary and expense is divided between states in exactly the same way that the conductor's salary is; it is divided on the mileage of his actual run.

Q. What I want to know is whether you treat the Iron Mountain and the Missouri Pacific as one, in your train auditors' expense?

A. No. We haven't a joint run, in the first place, but if we did have a run from a point in Kansas, on the Missouri Pacific, to a point in Oklahoma, on the Iron Mountain, we would divide that particular expense on the mileage of those two roads. But we haven't any joint run.

Q. Take an auditor running between Little Rock and Fort Smith; his run would be for six weeks. The next time he is liable to be transferred to run from Sedalia to Kansas City—on the Missouri Pacific?

A. Yes, sir.

Q. But you keep track of his mileage made in Arkansas?

5134 A. Yes, sir, we keep track of that.

Q. You interchange him from the Missouri Pacific to the Iron Mountain, as you please?

A. That is not a regular thing. What I mean is, we do not interchange them every day. It is not a daily occurrence.

Q. Every six weeks? You have some fixed period?

A. We will leave a man on a run say for six weeks or two months.

Q. And that other run is just as apt to be on the Missouri Pacific as it is on the Iron Mountain?

A. It is apt to be.

Q. More apt to be than not?

A. No.

Q. You want to take the fellow away from where he generally runs, don't you?

A. Our ordinary plan would be to run him in the other direction. For instance, if he was running from Little Rock to Texarkana, when the time came to change him, we would run him from Little Rock to Fort Smith or to Alexandria. His headquarters would be in Little Rock.

Q. Don't you use these men in your auditor's office for work there, when they are in town, or detail them for any work in the auditor's office?

A. When we detail them for work in the auditor's office they are no longer train auditors.

Q. You use them there, do you not?

A. As clerks.

5135 Q. I don't know what you call them, but they are on duty in the general auditor's office?

A. We have four or five men in the general auditor's office, whom we treat as extra men, and send them wherever we need them.

Q. And they do clerical work in the auditor's office when they are not on the run?

A. Yes, sir.

Q. If a man would come in from a run and you were short-handed, you would put him to work in the auditor's office?

A. No, there are very few men who come in off their run. They never come up to St. Louis unless they are coming up for a rest of a week.

Q. Haven't you five or six men there now?

A. Yes, but they are extra men, these five or six.

They may be in Kansas for one week; they may be in Arkansas for the next week, and they may not go out again for three weeks.

Q. In the meantime they are in the auditor's office performing work there?

A. In connection with the train auditor's accounts, turning in the train audits.

Q. They are really collecting agents for the auditor?

A. They are what?

Q. They are really collecting agents for the auditor; collecting revenue and tickets for the auditor, and bring them directly into the auditor's office?

5136 A. You mean the train auditor in general?

Q. Yes.

A. To the same extent that a conductor used to collect tickets and cash before we had train auditors.

Q. That was when the conductor had the two services to perform?

A. Yes, sir.

Q. Now the conductor has no services to perform in regard to the collection of revenue, collection of tickets, when there is an auditor on the train?

A. No, sir.

Q. These auditors have no control over the train at all?

A. Not a bit.

Q. They cannot give orders to the conductor in any way, I understand, as to the management and control of his train?

A. Not so far as the train is concerned.

Q. Mr. Johnson, you put in a lot of figures here on the effect of the court tariff; the effect of railroad rates and commission rates, at page 911 or 912, I believe it is:

The object of that, as I understand you, is to show that an increase of revenue does not necessarily mean the same increase of rates?

A. That is the object of exhibit number 54. That is the exhibit, I believe, that refers to it.

Q. All the material part of this exhibit is in your testimony?

A. Yes, sir.

Col. MOORE:

Q. The testimony explains the purposes of the exhibit?

5137 A. Yes, sir.

Judge HILL:

Q. You did not make any calculations of the corresponding increase of revenue and rates on your interstate business during the periods that you were making the calculations for the intrastate, did you?

A. No, that was impossible for the reason already stated, that we could not apply the old rates to the interstate business on account of the volume of business involved.

Q. Then these figures showing the rate increase and showing the revenue increase, would have no bearing at all as to the relation between state and interstate, either in rates or revenue, would they?

A. These figures would not make any comparison between state and interstate business, either revenue, or rates or volume.

Q. If you were looking into these figures to throw light on the relation between state and interstate, and whether there was an in-

crease in rate or an increase in revenue, these figures would be valueless?

A. These figures are compiled for the purpose of showing that it is impossible to say that when the gross revenue, or rather, when the average revenue per ton per mile for two different periods would show a difference of 96 per cent, that that 96 per cent does not indicate a 96 per cent increase in the rate. That is all these figures were compiled for.

Q. One rate? I mean, one rate as against the interstate rate; or against the state rate?

5138 A. No, the 96 per cent we have had quoted to us was the increase in the average revenue per ton per mile, on state business in one period as against another.

Q. It was used in this connection, if you recall; an average of 96 per cent on state, as against an average increase of 9 per cent on interstate business, for the same period.

A. Yes, sir.

Q. You have no light, in these various statistics you have put in on these different tariffs, of the corresponding increase or decrease, as the case may be, in the interstate rate, while these changes were taking place?

A. We couldn't give you that. It is impossible to get it for the interstate business. We have it for the state because we worked it up currently during all of these months, at a large expense, because we were practically compelled to.

Q. But the problem that we were putting to you and to Mr. Kimbell, involving the 9 per cent increase in the interstate revenue and 96 per cent in the intrastate revenue, as indicative of the relation between state and interstate, hasn't any light thrown upon it in these figures that you have put in on this matter?

A. It has to this extent: that we know from compiling these figures that the 96 per cent is wrong.

Q. You know it is wrong as indicative that the rates were 5139 increased 96 per cent?

A. Yes, sir.

Q. You do not mean that Mr. Kimbell's figures are wrong.

A. No, I know his figures are right, but the 96 per cent is not the increase in the rate.

Q. I understand your position, but the great and primary object of that you haven't thrown any light on, that relation we have been trying so hard to find out?

A. We would like to know what that relation is just as well as you do, but we can't get it. We have this as a matter of record and gave you all that we have.

Q. Have you gone into it enough to know whether if there was 9 per cent increase on the Cotton Belt, what would likely be approximately correct on the Iron Mountain, for the same period?

A. We haven't done anything like that. It would mean our working up another exhibit 26 for January 1909, or one month's business.

Q. That is the only way we can get this relation between state

and interstate, by working up your interstate business and setting it up with state business, for the same period?

A. Yes, and applying to the interstate business the rates that were in force during the period in question, just as we did this state business.

Col. MOORE:

Q. I want to ask you, Mr. Johnson, in that connection, if the result of this exhibit in regard to state business (which I
5140 understand shows that the 96 per cent increase in the revenue per ton per mile does not represent the increase in rates) does not inferentially show that the 9 per cent you refer to in the interstate business would not reflect the increase in rates, or the change of rates—whatever it may have been—in that class of business; whether in that way it does not inferentially show that in neither case, the state or interstate, can you take the increase in revenue, per ton, per mile, as indicating the increase in rates?

A. I think this exhibit shows that that is not the proper way to get at the increase in rates, whether it be state or interstate.

Col. MOORE: That is what I want to know.

A. The principle itself is wrong.

Judge HILL:

Q. Just what principle is it that you say is wrong?

A. The plan that was adopted of taking the average revenue per ton per mile, in January, 1909, and comparing that with the average revenue per ton per mile for the six months ending December 31, 1907, and saying that the percentage of increase in 1909 over 1907 represented the percentage of increase in the rates that were in force in January, 1909.

Q. I don't know that anybody has advocated that theory.

A. That is my understanding of the exhibit that Mr. Kimbell was asked to put in on that basis.

5141 Q. We are digging after the relation between state and interstate and of course, incidentally, to know how much you had increased your rates, but I think you will see that questions put to Mr. Kimbell and all the other witnesses, recognize the fact that the revenue is a varying quantity and a very varying quantity, and we have been discussing that now from the viewpoint that that revenue represents the rates; that we are assuming it represents the rates.

A. You assumed that the rates had been increased 96 per cent on state business and 9 per cent on interstate business, by that exhibit?

Q. We assumed that the revenue had been increased and that a large part of that increase was on account of the increase in rates; that the relative increase in the two rates would be represented by a relative increase in the revenue.

A. I don't understand that it would.

Q. There is nothing in these calculations or statistics here to show it would not?

A. Not so far as the relation between state and interstate is concerned.

Q. That is the only matter we have been interested in particularly, and you haven't thrown any light on that interesting problem in these statistics?

A. Not so far as that particular question is concerned.

5142 NOTE.—It having been discovered that an error was made in the figures in Exhibit 56, growing out of a mistake of the accountant, those figures will have to be revised as soon as it can be ascertained, and correct figures substituted; and a certain part of F. P. Johnson's Exhibit 56, based on those figures, will also have to be corrected.

Recross-examination of F. P. JOHNSON continued as follows:

By Judge HILL:

Q. Mr. Johnson, as page 910 you speak of the car miles in Exhibit I including the hauling of company material. As I understand your statement you do not claim there are any company tonnage statistics included in Exhibit I, based on company material?

A. No, sir, in Exhibit I there are some averages shown at the bottom of the exhibit showing the average loading per car; and that is based upon the ton miles and the car miles as shown in this exhibit. The car miles included cars loaded with company material, the tonnage of which is not included in the ton mileage figures.

Q. Is not that the proper way to make up these statistics?

A. No, sir, I wouldn't say so.

Q. That is the usual way of doing it?

A. No, sir. The railroad undertakes to show the average loading per car mile. They would include their company material with their revenue freight.

5143 Q. The company material does not enter into the revenue at all, does it?

A. Not at all, but it does enter into the average loading.

Q. Look at Exhibit I and you will see that they give statistics both ways.

A. (After examining exhibit.) That is all right. But the average number of tons of revenue freight considering loaded cars only, includes the cars that are loaded with company material. Now, then, the ton miles that form the other part of that calculation does not include the ton miles of company material.

Q. The only importance of this matter to which I am calling your attention is that the tonnage is not included in that, and the accountants have used car miles including the car miles made for the company material like the empty car?

A. Yes, and the only effect that has is upon that particular evidence.

In other words, the average loading per car on local trains considering local freight is not twelve tons.

Q. Fourteen tons?

A. Twelve in one case and fourteen in the other.

Q. You said "considering revenue freight": you mean company freight?

A. I mean revenue freight you have on this exhibit.

5144 That freight does not load on an average twelve tons or fourteen tons per car, because in that car mileage you have included only the revenue freight; and the car mileage includes the company material. And the same is true on the through train.

Q. That is a matter which runs into both of them?

A. Yes, sir.

Q. It is merely a question of whether you should include company material in making up the car mileage or not?

A. That is it.

Q. It seems the doctors of accountancy have disagreed again. You and Mr. Wharton have had a difference about Judge Farrington's opinion.

In your exhibit 55, which is your application of Judge Farrington's formula to the statistics in this case, I will ask you this: if the total freight transportation expenses were \$1,755,255.76 and the average cost of all business is .0026721 per ton per mile, then by multiplying this cost by three you get the cost of state business, and by leaving the interstate business at .0026721, do you not increase the total transportation expenses beyond \$1,755,255.76?

A. Yes, sir.

Q. Under this method, if the Interstate takes all transportation expense above the amount apportioned to the state, would not that result in charging the state with considerably more than three times as much per ton per mile?

5145 A. In making up this exhibit 55, I adopted the plan Judge Farrington adopted. I am not contending his plan is right any more than I am contending that Mr. Wharton's plan is right.

Q. What I am talking about now is the mathematics of it.

A. In the first case the figure .0026721 does not represent the average cost per ton per mile of all freight.

The ton mileage is 660,000,000 ton miles, and that brings about an average cost of .0026588.

Under Judge Farrington's method that extra cost should be increased by multiplying it by 100.5, or it should be increased .5 and that is your .0026721.

If I might explain, my idea about Exhibit 55 is that in applying Judge Farrington's formula, hire of equipment was not included in transportation expenses and that is what makes the difference.

Q. And you have put that hire of equipment in there?

A. Yes, sir. The Interstate Commerce Commission prior to July 1, 1907, included hire of equipment in transportation expenses.

Q. They did not in October, 1907?

A. No, sir.

And applying it to the statistics of this case, hire of equipment would not be included?

A. I don't know. I don't know what Judge Farrington would apply it to in October, 1907.

5146 Q. I am not talking about Judge Farrington but I am talking about the classification as it stands in this case.

A. The expense of the hire of equipment is still borne by the railroads, but it is not charged to the operating expenses.

Q. That is the point. The point of difference between you and Mr. Wharton is, as I take it, that you put the hire of equipment there and he took it as it stood?

A. He took our transportation account as it stood.

Q. In this case?

A. Yes, sir.

Q. And you changed it to conform to the later ruling of the Interstate Commerce Commission?

A. To the classification in force prior to July, 1907, when Judge Farrington's formula was applied to transportation expenses.

Q. Is not your mathematical calculation also made on a different basis?

A. A different basis from what? From Mr. Wharton's exhibit?

Q. Yes.

A. Yes, sir.

Q. Where does that difference come in?

A. In Exhibit G-1 which is worked out on the basis that the cost of state freight is three times as much as the cost of interstate.

Q. You worked it out yourself on the basis of $3\frac{1}{2}$ times?
5147 A. No, sir, not three and one-half times. I worked it out on the basis that Judge Farrington laid down.

Q. I am not speaking about what Judge Farrington did, but I am speaking of the mathematical result.

A. The final result is $3\frac{1}{2}$ times.

Q. That makes a difference of about \$50,000, in rough numbers, charged to state freight, does it not?

A. Yes, sir. But I still want to make it plain that I was trying to follow Judge Farrington's formula.

Q. I started my question on the theory that the doctors of accountancy had disagreed about it and I was trying to get at the mathematics of the disagreement.

I believe you stated one of your objections to the method adopted by the state in making this calculation was that by the change of these percentages you could make radically different changes—that it was susceptible of great variation: is that your objection?

A. This general formula adopted by the state, yes.

Q. Your revenue basis, of 100%, is liable to some slight variation too, isn't it?

A. You mean the arbitrary application of either 50%, 100% or 150%?

Q. Yes, or 200% or 250% I believe some of the witnesses have run to.

A. Of course, the application of any two of those percentages would make a difference in the result.

5148 Q. A mighty wide range in working out results there, isn't it?

A. I don't think it has the same application to these statements as the state's basis does, because you can find perhaps a dozen different

bases for each individual item of expense, and an argument for each of them.

Q. It appears in this case, an argument against each of them.

A. Yes, sir, and an argument against each of them.

Q. Here is another point of variance, if you make estimates on the revenue basis, based on revenue or based on ton miles:

I notice some of the witnesses made their estimates based on ton miles and others made their estimates based on the revenue. And that results in considerable variance with men holding the same views, in so far as they use different factors, does it not?

A. There have been no different factors used by the railroad witnesses in this case.

Q. I am not speaking of the different factors but the different views.

A. There have been——

Q. Some of the witnesses say they estimate the extra cost at so much per ton mile and others state so much on the revenue theory. I think about five times on the ton mile and two and one-half times on the revenue has been a favorite way of expressing it. Revenue and ton miles are not in proportion to each other just one-half?

A. There is not very much difference on the Iron Mountain figures.

Q. They are close to that but they vary on the Cotton Belt?

A. Yes, sir, I think a little more than that on the Cotton Belt and a little less than that on the Iron Mountain.

Q. There is another varying factor, the factor used in forming an opinion?

A. I think so far as the Iron Mountain is concerned the opinion based on four times as much on the ton mile and two times as much on the revenue, would not bring about very much difference in the result.

Q. Not very much but applying these same figures to the Cotton Belt it would make some difference?

A. Some difference, yes.

Q. You stated (I do not recall the page of the record) that in the mileage in checking coach miles there was a discrepancy between you and the state accountants; they had 651,000 and you made it 685,000; you remember that item, do you not?

A. Yes, sir, 751,000 the state has and we have 785,000.

Q. You know how that difference came, don't you?

A. It is made up of the difference in actual miles in individual trains. It is made up of a number of different items. This makes a difference of two and one-half percent.

Q. My understanding of the difference is the difference in floor space of the mail and baggage cars?

A. That is a part of it and then there is some difference in the actual mileage of the different trains run and the cars in the train.

Q. Take a car used for mail and express both and I understand the state has taken it half and half?

A. Yes, sir.

Q. You have taken your government contracts as giving the floor space, haven't you?

A. No, sir, we took the memorandum the state got from the express company showing the actual amount of space in the car on each run.

Q. You got it from the express company?

A. The state got it from the express company and gave it to us.

Q. The floor space the express company is entitled to?

A. The statement says "the amount of floor space used."

Q. I thought that was all based on the contract?

A. Oh, no, sir.

Q. If it was mail, express and baggage all in one car the state would divide it one-third to each, and you attempted to take the actual amount of space used by each?

A. Yes, sir. And then there were some differences in the 5151 mileage of the individual run that made up the balance of it.

We had our car accountants check over the entire passenger car mileage for that month and I do not suppose any two men could check out work of that kind and come out exactly alike.

Q. I suppose not. I suppose there were errors both on your side and on theirs and possibly on both. That is about your idea?

A. Yes, sir, that is my idea of it.

Q. The main difference is using one-half or one-third, as the case may be, I presume?

A. Yes, sir.

Q. In your exhibit 56, in correcting what you said in your testimony you thought was an error of the state, is not allowing proper mileage for the passengers carried in Pullman coaches, you put in figures there in round numbers for the month of October of 12,-000,000 passenger miles, of which 2,188,000 was in Pullmans.

It is a matter understood since we began this examination that an error has been discovered in that and I wish you would state just what you know about that.

A. The matter has just been called to our attention and we found in working up the number of passenger miles carried in Pullman cars that the clerks who made the report have duplicated a part of the passenger car mileage.

Q. You mean Pullman car mileage?

5152 A. Yes, Pullman car mileage; the passenger miles in Pullman cars. The conductor or train auditor in making his report, will report the entire mileage of the passengers in his Pullman cars. And frequently a train auditor will be changed on that run, and the new train auditor in making up his statement will also include the entire mileage of those passengers. That results in the duplication of some of the passenger miles.

We are arranging to take it now and correct it.

Q. We have not gone into it far enough yet to know the scope of the error?

A. No, sir, not yet.

NOTE.—It is agreed between counsel that the investigation which has been begun and is now under way to ascertain the extent of this error shall be continued by the state accountants and the company accountants and correct figures arrived at; and leave is granted to the complainants to revise that part of Exhibit 56 which is affected by this mistake. That the taking of testimony will not be affected by this but by this agreement the corrected statement will be filed later.

And, further, the railroad company has generously offered to bear the expense of this correction.

5153 Q. Mr. Johnson, I want to call attention to an exhibit filed by Mr. Roth (who I understand is sick and cannot answer any questions on cross-examination about it) and ask you if you are familiar with it?

A. No, sir, I am not.

Q. Have you examined it at all?

A. No, sir, only as it was filed here.

Q. I see a great many conclusions he has drawn here. For instance, he will say group 5 represents lower grade commodities carried in heavy loads with little, if any risk from loss and damage and consists of lumber and other forest products, salt, brick, lime and cement.

I have no way of finding out, unless some of you gentlemen can inform me, how that is made up and how he draws his conclusion.

A. Those groups are made up from a number of different commodities. I do not know what commodities were included in each group. As I have said, he made that up himself and I have no idea how he arrived at the different groups.

5154 T. A. HAMILTON, recalled, testified in sur-rebuttal as follows:

Redirect examination.

By Judge HILL:

Q. Mr. Hamilton, you put in evidence Exhibit C-1, which is a chart showing and illustrating certain rates, state and interstate, on the line of road south of Little Rock. Mr. Perkins, in discussing that at page 24 said, after explaining the rates set forth in your chart:

"In other words the state has picked out a comparatively small territory in Arkansas where this condition exists, to try to prove there is no relation between our state and interstate rates; while, as a matter of fact that comparatively small territory is an exception to the rule; although in that territory there is the relation between state and interstate rates as I have explained."

I will ask you if that is a correct statement that you have picked out a small territory there to prove this fact, and that that small territory is the exception to this rule.

Col. MOORE: The question is objected to because it necessitates the reopening of the line of testimony involved in the exhibit re-

ferred to and to that extent is original testimony and incompetent in surrebuttal, inasmuch as it may open up matter which would require further explanation on the part of the complainant.

A. First, on the question of the section of the line covered by Exhibit C-1 being the only portion of the line in Arkansas where the conditions illustrated in that chart were extant during 5155 the period of our inquiry I would say that I have taken the same tariff naming the interstate rates from St. Louis to points in Arkansas and have found that a similar condition exists on every section of the line which is covered by nine additional charts of similar character to Exhibit C-1, which I have prepared.

Q. Explain those charts, Mr. Hamilton, so it may be understood.

A. The charts are numbered for one to nine and to indicate the extent of the territory covered by them I have prepared as a recapitulation or summary of the charts an outline map of the Iron Mountain mileage in Arkansas, which appears first in the exhibit.

The portions of the Iron Mountain line colored in red are portions covered by the charts attached to the recapitulation.

The numbers shown opposite these red sections of the map are references to the charts which underlie it.

The mileage covered by the charts is 529 miles, including the territory covered by Exhibit C-1, which itself covered 7 miles.

Those 529 miles are 39% of the total Iron Mountain mileage in Arkansas.

The charts are similar in nature to Exhibit C-1, but cover different territory.

5156 Q. Explain the principle involved in this map and the charts.

A. Take one for example. Take chart five attached to the exhibit, the stations to which the rates apply, cover 79 miles on the White River division beginning at Fitzgerald just north of Newport and running to Cresswell. The red lines indicate the interstate rates from St. Louis to the various stations shown.

The graduated colored lines indicate the state distance tariff rates for the same mileage in Arkansas as would be covered on the haul from St. Louis on the through rate from St. Louis to these points.

It is not intended to compare the rates themselves in dollars and cents, but their relation one to the other.

To explain: First class rate from St. Louis to Fitzgerald was 80 cents. First class rate to Cresswell, 79 miles further distant (figuring the short line mileage via Diaz Junction) is also 80 cents. And the rate is 80 cents to all intermediate stations.

The first class state rate from the Missouri state line to Fitzgerald is 43 cents. The first class state rate to Cresswell, the most northerly station, is 56 cents, a variation of 19 cents, which is made gradually from station to station or in groups of five to ten miles.

The same is true of other state and other interstate rates.

5157 On this particular chart all of the interstate rates with the exception of class E are the same to the first and the last station on the chart.

Class E runs at the 15 cent level for 44 miles and at 16 cents the rest of the distance or 35 miles.

There is one chart to which I wish to call particular attention; that is number 2, covering eighty miles on the Helena branch; the first station being Jolly just south of Knobel, and the last station shown on the chart being Wynne, the junction of that line with the line from Bald Knob to Memphis, the distance between stations being eighty miles.

The first class interstate rates begin at 70 cents and is 70 cents to the first three stations shown on the chart.

The next station the rate is 71 cents.

To the next two it is 72 cents. And then to all except the last two stations on the chart or a distance of 48 miles, it is 73 cents level, raising one cent to each of the last two stations.

The second and third class interstate rates are absolutely level, being the same to the first station as to the last.

That is all true of the fourth class rate.

Class A from St. Louis recedes.

That is, the rate to the seventh station south or Paragould has dropped one cent, although the distance has increased.

5158 That is true of class B, the rate has dropped two cents when it reaches that station.

And of class C, which has dropped two cents. And class D has dropped two cents. And class E has dropped three cents.

That decrease in the rate remains effective for 19 miles, and then the rate resumes its former level and goes on on a parity with the first and second class rate.

On this same chart the state rates are graduated according to distance, the rates increasing in five or ten mile groups, according to the State Commission tariff.

Q. This was based on the rates in effect during the last half of the year 1907?

A. This chart was based on the interstate rates in effect during the last half of 1907 and also on standard tariff No. 3.

The map which is a recapitulation, bears a typewritten statement practically the same as what I have given here.

Q. The balance is made up practically in line with the explanation you have given?

A. Yes, sir.

Judge HILL: We offer in evidence this exhibit.

The exhibit referred to is marked "Defendant's Exhibit L-1.

Said exhibit is in the words and figures following to-wit:

For Exhibit L-1, see Vol. 9, page 5886.

5159 Judge HILL:

Q. Mr. Hamilton, you did not finish your answer I believe, as to the second part of the question?

A. I directed the answer so far given to covering the statement that Exhibit C-1 covered the only portion of the line where these conditions existed.

As I understand the latter part of your question, the quotation from Mr. Perkins' statement, was that a certain relation did exist.

Col. MOORE: I object to the witness going into the effect of it. That certainly would not be competent.

Judge HILL: I am inclined to think you are right about that.

Q. Mr. Hamilton, at page R7 Mr. Perkins in discussing the rates to Texas common points in answer to some testimony of Mr. Ludlam and exhibits filed uses this language:

"The rates to Texas common points are not made entirely from St. Louis. In many cases the rates are made from the territories east, and rates are then fixed from St. Louis on differentials under the rates so fixed from Eastern Territory."

This is due to the fact that the further east we go the more keenly do we feel the water competition of the Steamer Lines from New York to Galveston and Texas City. In adjusting our rates to Texas we attempt to arrive at a rate which will yield an average return. In other words, we do not figure on the rates to Paris, in the northern part of the state of Texas, nor on the rates to San Antonio, in the southern part of the state, but a rate which applied to the entire territory would yield an average return."

I wish you would state whether you have found that to be correct and if you think it is incorrect, if you have prepared a chart illustrating how those rates are made different from the way Mr. Perkins understood it?

5160 Col. MOORE: The question is objected to as not being proper surrebuttal evidence.

A. The rates are made in the way which Mr. Perkins says they are made. The tariffs show that.

But their division between the carriers hauling the freight results in greatly varying rates for the haul in Arkansas.

Q. You mean greatly varying revenue rather than rates, do you not?

A. Greatly varying revenue, assuming the business moves under the rates.

Q. What I am particularly calling attention to is the average of revenue. As I understand, that is made up by the rate and the division?

A. Yes, sir, that would be governed by the average movement of freight also.

Q. That is true. Now proceed with your explanation.

A. I have prepared a chart which covers the rates, or the Iron Mountain proportion of the rate in Arkansas on business from Chicago and Pittsburg and their surrounding territories, and St. Louis, to fifteen stations taken at random from the map of Texas:

The stations named are shown as taking Texas common point rates and I have selected the first class rates, for purposes of illustration.

Mr. PERKINS:

Q. Can you state what roads those stations are on, so we can follow that up?

5161 A. I have Victoria on the Texas and New Orleans.
Brownwood on the Fort Worth & Rio Grande.

Wharton, Texas, on the G. H. & S. A.

Abilene on the Texas and Pacific.

San Antonio on several roads, among them the I. & G. N. and I have figured I. & G. N. divisions on this chart.

Eastline, Texas, on the Texas and Pacific.

Big Springs on the Texas and Pacific.

Austin on the I. & G. N. among other roads and I have used I. & G. N. divisions.

Corsicana on the Cotton Belt.

Waco on the Cotton Belt and I have used Cotton Belt divisions.

Palestine on the I. & G. N.

Fort Worth on the Texas and Pacific among other roads and I have used Texas & Pacific divisions.

New Boston on the Texas and Pacific.

Marshall on the Texas and Pacific.

Tyler on the I. & G. N. and Cotton Belt, and I have used Cotton Belt divisions.

The first class rate from Chicago to these points—that is, the proportion of it which Iron Mountain would earn in Arkansas is indicated by a red line.

The Iron Mountain Arkansas proportion of the Pittsburg rate is indicated by a blue line.

And its proportion of the St. Louis rates is indicated by
5162 a green line.

In arriving at the proportion accruing to the Iron Mountain in Arkansas, I have applied the regular divisions on Chicago and Pittsburg business north and east of East St. Louis, as shown in the company's division sheets current in 1907; and the divisions south of Texarkana as shown in their division sheets with the southern lines.

The remainder or the proportion of the rate between St. Louis and Texarkana I have divided between Missouri and Arkansas on a track mileage basis, which is the railroad's method in this suit, of locating revenue to Arkansas.

The chart speaks for itself.

The proportion of the rates in cents per hundred pounds is shown in figures across the top.

The lines extend to a figure which indicates the rate accruing to the Iron Mountain on its haul in Arkansas for the business for each station from each point indicated.

The rate accruing to the Iron Mountain in Arkansas on business from Chicago to Victoria, Texas was 31 cents.

From Chicago to Tyler, Texas, it was 59 cents.

Q. That would be exactly the same movement over the Iron Mountain tracks?

A. From the Missouri-Arkansas state line on the Iron Mountain rails to Texarkana.

Mr. PERKINS:

Q. You are using the first class rate?

A. Yes, that is the only rate shown on the chart. The rate used is the first class rate arrived at by adding the established differentials to the St. Louis rate on the Chicago and Pittsburg basis. And the divisions were obtained from the percentage sheets on file in the office of the auditor of freight receipts of the Missouri Pacific Railway.

The two extremes of the chart are 31 cents on the business from Chicago to Victoria, Texas, and 66 cents on business from St. Louis to Tyler, Texas.

The others speak for themselves.

Col. MOORE:

Q. They vary between those two extremes?

A. Yes, sir.

Judge HILL:

Q. I think it is in the record but I wish it restated here for the purpose of clarifying a situation:

The rate you have put down here is the proportion accruing to the state of Arkansas?

A. Yes, sir, on the basis I have explained, track mile division of the proportion of the rate from St. Louis to Texarkana.

Q. What I want to get at is, that track mileage basis is the one used by the railroads here?

A. In locating earnings to Arkansas, yes, sir.

Col. MOORE: I object to the statement and to the exhibit which counsel proposes to now file, on the ground of not being proper rebuttal.

Judge HILL: We will offer in evidence this exhibit referred to by Mr. Hamilton. The exhibit referred to is marked "Defendant's Exhibit M-1" and is in the words and figures as follows to-wit:

5164 For Exhibit M-1 see Vol. 9, page 5897.

Q. Mr. Hamilton, when you were on the stand before you were cross-examined as to various cars you traced up that were put before you in the October movement, Exhibit I, I believe it was. Redirect examination on that was deferred until you had time to look into the matter.

I will ask you if you have gone through that thoroughly and found out the extent of the errors upon which you were questioned in your cross-examination?

A. Yes, I have gone over our work sheets since that time. By "work sheets" I mean the sheets on which we worked up our figures which are condensed into Exhibit I; and have given particular attention to the cars referred to by Col. Moore in cross-examination

on the subject heretofore. I found there were thirty cars involved which were referred to as making sixty-eight different moves. That is, as appearing sixty-eight times on our sheets. I do not mean that each of the cars appeared sixty-eight times but the thirty cars represented sixty-eight movements in the local trains.

I found that our weight as shown in tons in our classification as between state and interstate was correct on seven of these movements. I found that we had omitted to locate weights for forty-three cars in our statement, which cover some 20,835 cars.

I found that the sixty-one moves or sixty-one appearances of cars on our worksheets where we had made errors in ascertaining 5165 the weights or in classifying the weights when ascertained would when boiled down and applied to paragraph seven on page eight of Exhibit K result in taking \$257.68 from the cost of intrastate business and adding that amount to the cost of interstate business.

That would be the net result of making the correction in our figures.

Q. Your error worked out against the state, then, to that extent?

A. Yes, sir.

Q. What percentage of error would that be? Have you ever figured that out?

A. If the changes I have indicated were made in Exhibit I, the percentage shown in that exhibit would read in this way:

Intrastate freight on local trains 39.02% instead of 39.10%.

Intrastate freight on through trains (I am speaking of ton mileage now) would read 60.98% instead of 60.90%.

Total revenue freight on local trains would read 11.17% instead of 11.18%.

Total revenue freight on through trains would read 88.83% instead of 88.82%.

Following that in Exhibit K it results in the change in dollars and cents to which I have already referred.

Col. MOORE: What cars does that result you have just now mentioned apply to?

5166 A. It applies to the car numbers——

Q. To which I called your attention?

A. Yes, sir.

Judge HILL:

Q. You remember at that time I told you I wanted to examine him further, after he had had a chance to look them up.

There is another matter in connection with that. You stated there were a few cars you missed; they were out of view in some way and you could not get the exact number: did you find that?

A. I think I stated it was 43 cars.

Q. Out of the total of 20,000?

A. Yes, sir.

Q. Which you never got trace of?

A. That we did not locate.

Q. I thought you passed that and had not looked it up?

A. I stated that in beginning my answer to your question.

Q. Mr. Johnson in his testimony criticised your October expenses in regard to labor and overtime, in which he stated as I recall it, that there would be an inaccuracy in it as to the labor and overtime that might appear in the last few days of the month; and this morning he corrected that as to the overtime and said there would be some lap-overs on the straight time.

A. Yes, sir.

5167 Q. From the last days of the month into the next month?

A. Yes, sir.

Q. I will ask you if you adjusted that and if so how you did it?

A. Our process for locating the labor cost for the local freight trains was to ascertain from the time books the amount of time, regular, overtime and constructive time, that was put in by each train crew; and apply to that the rate of pay indicated in the company's contract with the men in the different branches of this train service; and also indicated in the body of the time book opposite the trip, if the men were in diversified service, or at the head of the page if they were in one class of service throughout the month.

We found at some times one portion of the crew would not have gotten its time slips in to the timekeeper for the last day or the last two days of the month in time to get it into the timebook.

As I understand the process, the conductor reports time for himself and the brakeman under his supervision; and the engineer reports the time for himself and the fireman. Sometimes the engineer's timeslip would not have been reported. If that was the case we gave him the same time, regular, constructive and overtime, as the conductor got but at the engineer's rate of pay.

If the conductor's timeslip was missing we gave him the same time as was reported by the engineer, at the regular rate of
5168 pay for conductors; and the same thing in the case of the brakemen.

I recall no instance where timeslips for both ends of the train-- if I may put it so, were missing.

But this is true as to lap-overs: I recall a few items of September time paid for in October. They were the omissions made in September. There were a few of those, but not many. But the time we have obtained for the local trains and the cost of that labor is, I think, accurate. I think our method is correct for the reason that I can conceive of no way a conductor could be engaged in road service without an engineer or an engineer without a conductor.

Q. That difference belongs to what we have designated as "negligible quantities"?

A. I think so.

Col. MOORE: I would like him to state what he did in cases where he failed to get the time of both the engineer and the conductor?

A. I do not recall any instance where we did not get one end of the train crew. But if that were the case my instructions were, and I did it for such portions of the statement as I made myself, to take the time shown by the dispatcher's sheet for that portion of the road. It might be that we might miss some few hours representing both ends of the train crew.

Judge HILL:

Q. Were those instances many or few?

5169 A. I do not recall many such instances. My memory does not recall them, if there were any.

Q. Mr. B. W. Moore, trainmaster, testified in rebuttal on the order of cars in trains leaving terminals and put in an exhibit for redball train No. 55 as an illustration of the fact that the trains were not broken up in terminals. There was also some question as to the order in which the trains were made up:

I will ask you to take his exhibit and apply the wheel reports to it and see what the result would be on that, Mr. Hamilton?

A. I have not in my possession the wheel reports which cover Mr. Moore's Exhibit. That covers train 55 for the entire month of October. But, as I understand the purport of the exhibit it was to show that train No. 55, or the trains of which train No. 55 was assumed to be a type were not broken up, or did not receive much switching at division or district terminals.

I made considerable examination of the wheel reports for October, 1907, during the time we were handling them for the purposes of our local train figures, and for the statements which I have put in evidence before, as to the delay of cars in through trains at district terminals, and predicated on the assumption that rule No. 2 on the back of the wheel report, which states that "cars must be reported in train order, commencing with the caboose, to show the

5170 makeup of trains, leaving division terminals," and predicated on the assumption that that instruction was followed and that the conductor listed his train in the exact order in which it was made up, I did compare practically all of the wheel reports into and out of these district or division terminals for October, 1907, and found that the order of the cars leaving the most central terminals, for instance Hoxie, was different from the order in the train of the same cars leaving Little Rock, in a great many instances. I take that as an illustration.

I assumed from that if both conductors followed the instructions and listed their cars from the caboose to the engine, or vice versa, as they stood in the train, that shifting must have taken place and on that I predicated my belief that trains were shifted at division terminals.

Mr. Moore said that the conductors disregarded that instruction, in order to group the cars, system and foreign for the benefit of the car accountant, to minimize the work in his office.

The actual inspection of the wheel reports does not develop that they group the cars in that way.

I have before me the original wheel reports furnished me by Mr. Johnson for the Arkansas Division, for the 10th of October, 1907. I selected this at random from several I had gotten from him for the purpose.

The first train shown here is an extra through train from Little Rock to Texarkana on October 10, 1907, being extra No. 58.

5171 I find out of a total of 55 cars exclusive of the caboose in the train, the first three are foreign cars, then two system

cars; another foreign car; another system car; then a group of eight or ten or twelve foreign cars; another system car; two more foreign cars; another system car; six foreign cars; three system cars—and so on down; indicating there was no regrouping of the cars by the conductor for the purpose of expediting the work of the car accountant. And he had to all appearances followed the instructions on the back of the report and listed his train as it stood.

That is true of every other train, in fact, all of the through trains, in which there were both system and foreign cars, in this entire day's wheel reports.

On that I based my idea that train No. 55, the redball crack train on the main line which got little or no terminal handling was not a type of all the through trains on the road.

Q. Mr. Amoucek put in some exhibits on that subject, did he not?

A. He covered practically the same ground as Mr. Moore, taking some thirty trains out of Hoxie as a type.

Q. How did he get the thirty trains?

A. He took them from some work sheets we had prepared, on which we counted the cars into and out of the terminals and on which we showed lapsed or delayed time in the terminals.

5172 We simply prepared that to use in a division of expenses.

The other sheets were made—those to which in my mind Mr. Amoucek's criticism would better be applied—were sheets in which we showed the breaking up of these trains at terminals and varying delays to the cars.

Q. He did not criticise those?

A. No, sir, his testimony was along the same line as Mr. Moore's as I understood it.

5173 Following the afternoon session, 12/17.

Q. Mr. Hamilton, have you examined Mr. Roth's exhibit and testimony in the form of statistics, copied into the record in his rebuttal testimony, commencing at page 867?

A. Yes, sir.

Q. Do you understand the purport of those or the method or manner in which they were made up?

A. I think I understand the method in which the table on page R. 869 was made up, but the purpose of the exhibit I cannot satisfy myself as to and do not quite understand.

Q. Do you know of any bearing it has in this case at all, as far as you are able to judge it?

A. I must confess that I have not been able to see its application.

Q. Take that table on page R. 869 and state what you understand it is.

A. I understand that is a table showing in six groups of commodities, the relative percentage in ton miles of each group to the total and the relative percentage of revenue under two heads, one covering the entire Missouri Pacific Iron Mountain system, and the other intrastate business in Arkansas.

The basis on which that was made up, or the method on which it was compiled, was stated by Mr. Roth on page R. 867, to the

effect that he has graded the various commodities into six groups, according to character, loading, risk of loss and damage, handling and incidental cost.

Q. Do you know how any such grading as that could be made?

A. I think it would require an intimate knowledge of transportation conditions and the results of transportation.

5174 Q. Do you know of any system of grading that way, or is it apparently some opinion that is expressed in that way?

A. The groups are arrived at on a variety of assumptions which are set forth under the head of each group, and which, it seems to me, would require an intimate knowledge of transportation conditions and the results of transportation. The assumptions are that certain classes of freight are more liable or do receive actually, more loss and damage, more handling, etc., as set forth.

Q. That goes into the realm of opinion, purely, as to whether those assumptions are correct or not?

A. Exactly, unless we had statistics as to the effect of transportation on these various commodities.

Q. Do you know of any such system as that, anywhere?

A. No, sir.

Q. You have been investigating?

A. Special investigation given it may determine that, perhaps, to some extent, but—

Q. Without having some key to guide you, as a basis, does that mean anything to you as it stands?

A. Not without knowing Mr. Roth's reasons for grading the commodities as he has grouped them and what are in the group, in detail.

Q. And what influenced the putting of this commodity or that, into this group or into the other group?

5175 A. We would have to know the rates of the various commodities; the average haul of each commodity; the amount ordinarily transported; the proportions of each commodity to the other commodity in the group, before we could arrive at a definite conclusion.

Q. What is Mr. Roth's work; do you know the line of work he has followed?

A. From my observation in and about the General Auditor's office in the Missouri Pacific, he has been engaged in compiling statistics of various kinds and especially in the last year or so in getting up a statement of the effect of the application of the inhibited rates in Arkansas on the current traffic.

Q. He is a statistician?

A. I so understand.

Q. One of the witnesses for the Iron Mountain, in rebuttal, Mr. Cannon, I believe it was, testified that during October, owing to a congestion of the business, that there was a shifting of through business on to the local trains in Arkansas;—probably other witnesses expressed opinions along that line, but I remember that one in particular:

Have you investigated that question and prepared any statistics on that subject?

A. Yes, sir.

Q. I wish you would give us the benefit of it.

A. Exhibit "I" filed by the State, covering the month of October, 1907, shows the average number of cars per local train to have been 16.6.

As I recall what Mr. Cannon said, he stated that to relieve through trains during the month of October—which he said was a more or less congested period—they had burdened the local with more than it would ordinarily haul of freight which went from one end to the other end of its run. That is, it carried some of the burden of the through train during that period and that that would reflect itself in any ton mileage figures that might be made as to the local trains' performance.

As I recall it, he stated that that would result in putting more than a normal amount of interstate ton mileage on the local trains.

Q. That is the substance of it.

A. I have had in the last week or two weeks, the wheel reports for all of the local trains on the Iron Mountain in Arkansas, for the month of March, 1907, a spring month of the same year.

I find that the average cars per local train, for that month, were 16.7.

Q. What was it in October, 1907?

A. 16.6.

Col. MOORE: I do not think it is proper for you to go back—

Judge HILL: You are the one that brought that in in rebuttal. We took your testimony to begin with, that October was normal. We did not introduce testimony on that, and then in rebuttal you took this testimony of Cannon and others, to show it was not.

5177 Col. MOORE: This is objected to because it is a reopening of a matter that has been gone into before by the state.

A. The figures that I have just quoted were obtained from the wheel reports and the car mile calculations shown in the wheel reports by the statistician in the car accountant's office.

Those figures which we have abstracted for the local trains were an integral part of the total car mileage figures made by them for that month for the information of the operating officers of the Company and other statistical purposes.

The method followed was to abstract the car miles made by the local and the train miles made by the local and dividing the car miles by the train miles to get the average number of cars in the train each mile, which is exactly the process followed in compiling Exhibit "I" for October.

Q. You just matched March, 1907, with October, 1907?

A. Yes, sir.

Q. And found on the second decimal a difference of one point?

A. On the first decimal a difference of one-tenth of a car more in March than it was in October.

Q. Have you any other statistics on that point?

A. Do you mean as to the normality of October, from a transportation standpoint?

Q. Yes.

5178 A. Yes, sir. I have made a comparison of the October movement with the six months which covers the period of our inquiry in this case, the last six months of 1907.

I find that the freight train miles made in Arkansas on the Iron Mountain in October, 1907, were an exact one-sixth of the freight train miles made in the six months ending December 31, 1907—16.63%, an exact one-sixth.

I find that the freight car miles made in October, 1907, were also one-sixth of the freight car miles made in Arkansas during the latter one-half of 1907; they were 16.57%, virtually one-sixth.

Q. You mean per cent of what; of the total train miles made?

A. No. The October car miles were one-sixth of the freight car miles made in the six months' period.

Q. Ending December 31, 1907?

A. Yes, sir, the period of our inquiry here.

Q. Anything further?

A. No, sir.

Cross-examination.

By Col. MOORE:

Q. Mr. Hamilton, are the state rates upon which the graphic chart filed by you as Exhibit "L-1" is based, the rates prescribed in the Standard Distance Tariff, No. 3, put in force by the Arkansas State Commission?

A. Yes, sir. That is, they were taken from Standard Distance Tariff, No. 3.

5179 Q. Of the Arkansas Commission?

A. Yes, sir, the copy was furnished by the Commission.

Q. I will furnish you a copy of that and if it is not already in, will you file as an exhibit a copy of that tariff? If it has already been in evidence, and I think it has, it will not be necessary to do it.

A. Yes, sir.

For Exhibit N-1, see Vol. 9, page 5899.

5180 Mr. WRIGHT, recalled, testified as follows:

Redirect examination.

By Judge HILL:

Q. You testified in this case on an estimate of switching done by local trains and criticism has been made of your testimony in regard to two stations, that I feel call for an explanation.

Here is a statement given in Mr. Johnson's testimony at page 886:

In referring to your work-sheet he says:

"I notice in his worksheet he allows at Bald Knob ten cars, five set out and five picked up. But for some reason allows but ten engine trips.

At Kensett he allows four cars set out and four cars picked up, making eight in all; but allows only ten engine trips."

I wish you would explain why you made it in that way, if that is the way you made it?

A. When I made that statement I had in mind the peculiar condition that existed at Bald Knob, which is the junction station of the main line and the Memphis branch.

At Bald Knob proper the business is very light, but there is likely to be probably an average of three cars that would be picked up by the southbound Iron Mountain locals that would be destined to points on the Memphis branch. The Memphis branch local 5181 does switching for those cars, both those to be delivered to the main line and those to be received from the main line.

Therefore, it would not be necessary for the main line local to perform any more than what is called a short "kick," kicking those probably three cars to the lead of the Memphis Branch.

The same would be true of cars that would be picked up at Bald Knob, that were set out there by the Memphis branch local at a point just south of Bald Knob.

Q. If I understand you, there are more cars there than are switched locally?

A. That is the idea.

Q. And you put down the number of cars and put down for switching trips the number that would be switched locally?

A. Yes, sir, and made a larger allowance for the locals than might be made for the Memphis branch, for instance.

Q. What about that Kensett situation?

A. The Kensett situation is somewhat similar to that at Bald Knob. The main business at Kensett is with the Doniphan Lumber Company. Kensett is a very small local station—that is, the business for Kensett proper is very small. The main business there would be for the Doniphan Lumber Company, which is a company situated about two miles out on a little branch line running from Kensett out to Red River, and the Doniphan Lumber Company operates its own engines and it has the privilege of coming in on the

5182 Iron Mountain track, and picking up cars destined to its mills, and also placing cars destined to points on the Iron Mountain road. So it is unnecessary for the Iron Mountain engine to do anything more than set those cars for the Doniphan Lumber Company out on the switch. It is unnecessary to make any switching movement for them, except a short kick.

Q. And you allowed for the switching locally to Kensett, and not for that performed by the Doniphan Lumber Company?

A. Yes, sir, I figured that the business at Kensett would average about one car a day. That would be a high average. That would be two cars a day each way; that is twenty cars—or whatever number of working days they have. It would be a high estimate, too high an estimate.

I see I allowed here four engine trips. That would allow one engine trip for the business of the Doniphan Lumber Company

and one for the business for Kensett. That is the way the conditions I had in mind were when I made this statement.

Cross-examination.

By Col. MOORE:

Q. Mr. Wright, you did not refer to these matters you have just now explained, in your former testimony, did you?

A. Those peculiar conditions? No, sir, I don't believe I did. I do not remember that I did.

Q. In your statement when you were on the stand, you allowed for four cars set out at Kensett and four picked up; and you
5183 allowed for ten engine trips. Does not it usually take two engine movements to set out a car and pick up? Would not that ordinarily allow for sixteen engine movements?

A. It might be possible it would take that many.

Q. Does it not usually do so?

A. No, sir, not in practical railroading.

Q. If you set out a car you have to move it to the track where it is going to be set out, do you not?

A. If there are four cars it might be that they are in such a position in the train that it would be necessary to make a switching movement for each car; but it would be hardly probable.

Q. In several other places I notice you have allowed two engine movements for each car: why did you not make the same allowance at Kensett?

A. For the reasons I have just stated—that the main business at Kensett was for the Doniphan Lumber Company and switching was not required.

Q. On what basis can you assume that eight cars would require just ten trips?

A. I don't know why I made the statement of eight cars. I did not have that many in mind.

Q. That is your statement given in evidence, is it not?

A. That was too high an estimate, if I made that estimate. I do not think the business will run that much.

Q. You assume your evidence was mistaken in that respect?

A. If I stated eight cars that is a mistake.

Q. Four cars set out and—

5184 A. As I stated, probably one would be for Kensett and the others would be for the Doniphan Lumber Company.

Q. You stated "probably"; you do not know?

A. It is all probability. I do not know any of these as true facts.

Q. It is all assumptions?

A. It is not based on any actual statement that has been made but merely my opinion formed from the business at those stations.

Q. In other words, it was simply your inference or assumption: you cannot say that is correct, can you?

A. I made up no statistics for those stations. Although I try to make a high average for them.

Q. At Bald Knob you show five cars set out and five picked up

and you allow ten engine movements; whereas, at other places you have doubled that: why did you make that difference at Bald Knob?

A. Just because, as I stated, the Memphis branch local does the switching for this business. It picks up and sets out at Bald Knob for the main line. That is an operating condition that prevailed there.

Q. You explained that in your examination in chief. What I want to ask you is this, you predicate that upon the assumption that all the Memphis branch line switching must be done by another engine and not by the Iron Mountain road?

A. Yes, sir, that was the operating condition that was in force at the time and is yet so far as I know.

5185 Redirect examination.

By Judge HILL:

Q. Were you familiar with the way the passenger traffic was handled through Little Rock in 1907?

A. Yes, sir.

Q. Here is a statement to which I direct your attention, made in Mr. Johnson's testimony at page 903. It reads as follows:

"If the passenger buys a through ticket to a point reaching beyond the state of Arkansas, I cannot conceive of any item of expense which should be included under station service, that would be charged to that passenger."

"Is it not the universal rule that a trans-state passenger, as well as all other passengers, buy a ticket from the origin to the end of their trip?"

A. Yes sir."

I wish you would explain how the trans-state passengers are handled at Little Rock. Take the passengers from Texas that go east through Memphis; or take passengers from the south that go west through Fort Smith: Explain that situation there, Mr. Wright, if you please?

A. The trans-state passengers from the Iron Mountain between Little Rock and Texarkana destined to Memphis would use train No. 4 or No. 8 into Little Rock. They would use the two morning trains.

Q. You mean by that a train running from Texarkana to Little Rock?

A. Yes, sir. They would use the morning train from 5186 Texarkana to Little Rock and then change at Little Rock, taking train No. 204. They would change at Little Rock and take the train from Little Rock to Memphis.

Q. They make close connection there?

A. No, sir. Between train No. 4 there was, as I recollect it about 1 hour and 40 minutes and for train No. 8 there was pretty close connection, not more than 20 minutes.

Q. How about those passengers going south, through Memphis, using Memphis as the gateway from the east. All that travel going

through Memphis and coming back the other way, coming from the east and going into Texas: how is that handled?

A. They run two passenger trains from Memphis to Little Rock. One that arrives at Little Rock in the morning and the passengers would have to change cars at Little Rock and take the main line train. Those that used the other train, known as No. 223, would go straight through to Texarkana.

Q. There is one of those trains that goes straight through to Memphis?

A. One goes straight through. But the fastest train, No. 204, runs only to Little Rock and the trans-state passengers would have to change cars at Little Rock for points south of there.

Q. Suppose a passenger from Louisiana on the line of the Iron Mountain road coming to St. Louis would buy a ticket at 5187 Alexandria or Monroe or any other of those points down there, how would that be handled?

A. They would have to change at Little Rock.

Q. They would have to spend the night there, would they not?

A. No, sir, if they used the Iron Mountain train No. 5 they would make quick connection there—that is, not more than one hour and twenty minutes. And the same is true of the night train. Unless the night train is late they would not have to stay there all night. And the same is true of the business for the Fort Smith branch. They would have to change at Little Rock.

Q. How about the White River branch? Say a passenger coming from Memphis, Louisiana or Texas or any other point beyond the state of Arkansas, coming into Little Rock and going out to Springfield, Missouri, or any point on the White River branch?

A. They would make a change, one at Bald Knob and one at Newport.

Q. They would change at Little Rock, too, wouldn't they?

A. Not a passenger from Memphis.

Q. Take a passenger from Louisiana or Texas.

A. Oh, yes, he would change there.

Q. He would make three changes, would he not?

A. Not necessarily, no, sir. It would not be necessary to change except at Newport. From Texas down to a point beyond the 5188 state line on the White River branch, would be a trans-state passenger or an interstate passenger and would change at Newport.

Q. For the purposes of this question, Fort Smith is a trans-state point.

I will ask you how the travel from Fort Smith going east by way of Little Rock to St. Louis, Memphis, New Orleans down to Texas would be handled?

A. You mean with regard to changing cars?

Q. Yes. Could they make any through trips?

A. No, sir, not the way the trains are operated. They would have to change at Little Rock.

Q. In any direction they wanted to go to get out of the State?

A. Yes, sir.

Q. I believe I am mistaken in saying that Fort Smith would be a trans-state point. It would be for half only. I believe that is right—is it not Mr. Johnson?

Mr. JOHNSON: To the extent of those two trains that cross the bridge.

Mr. WRIGHT: Two cross the bridge and four others do not.

Q. There is a nearer connection between Fort Smith and St. Louis by the Frisco than by way of Little Rock, isn't there?

A. I believe there is.

Q. You don't doubt it much, do you?

A. I don't doubt it.

5189 CHARLES S. LUDLAM, recalled testified in sur-rebuttal as follows:

Direct examination.

By Judge HILL:

Q. Mr. Ludlam, in an exhibit filed by the Railroads, number 56, in "Maintenance of Equipment" subdivision (b), under the head of "stopping and starting" the Railroads have put this in:

"Car miles, same, with local car miles multiplied by eight."

In an exhibit filed by the State the same factor was used, except the multiple was four, representing (as explained in the testimony) four stops of the local as against one of the through: Now, I assume that this "eight times" is based upon the testimony of Mr. Gray and Mr. Ward, which I want to read to you:

Mr. Ward, at page 617, after quoting your exhibit "K" said:

"I assume that these average distances as stated are approximately correct. But that does not constitute a proper measure of the expense of handling local as against through service, because the through train in starting and stopping simply takes the siding, and after it has met the train, which has the right of the road, it then proceeds; or, in many cases, its stop is only for the purpose of taking coal and water and it does not have to stop even while the man turns the switch. On the other hand, the local train goes into the siding and after it is there it has its work to do by taking out the cars or placing in cars at the various industries or on the house track at that station; and it must pick up other cars and place them in the train. To an extent that constitutes, for all practical purposes, a terminal handling for all of the cars in that train, at practically every station along the line of its run. So the multiple of four to one for the through service, on account of the assumed difference of five miles and twenty miles would not be correct.

5190 It would be more nearly eight times, although I don't know that eight miles is accurate. However, it is more nearly eight times than it is four."

And Mr. Gray, at page 712, makes practically the same statement, without using this figure 8 as a multiple:

I want to ask you if they are correct in using eight instead of four and for the reasons that they give?

A. No, sir. The multiple of four is used to apply to the question of starting and stopping only. The question of the increased cost of the terminal handling on the local train is covered by a separate allowance.

Q. Where is that? Point that out. I think these gentlemen just failed to understand that and I want you to point it out.

A. That is on the same exhibit, under subdivision (b) "Maintenance of equipment."

We make an allowance just below the allowance referred to for stopping and starting. We make an allowance for terminal handling by multiplying the mileage of the cars in the local trains by two and using the mileage of the cars in the through trains as they were.

Q. What does that represent, Mr. Ludlam?

A. That represents that on the average the cars in the local train will receive two terminal handlings to one terminal handling on a through train. That is in the case of the Iron Mountain, I am referring to.

In the case of the Cotton Belt we allow four terminal handlings on a local train to one terminal handling on the through train.

That is based on the premise that the local train will start out with a load of cars and that it will distribute all of those cars during the course of its run, and that during the same run it will pick up an equal number of cars, which it will carry into the last terminal.

That assumes that every car on the local train will be set out during the course of the run of the local train and another car picked up in its place. As a matter of fact there are some of the cars that start out of the terminal, on a local train, that go through to the end of the run of the local train without being set out.

Q. That operates as a maximum as against the local train on this terminal handling between division points?

A. Yes, sir.

Q. And it is the very item that Mr. Ward and Mr. Gray discuss, is it not?

A. Yes, sir.

Q. I presume those gentlemen had not studied the exhibit carefully enough to see that that is taken care of.

A. I should assume from their evidence that they did not understand the exhibit.

Q. To take the eight times, as done there, would practically amount to doubling all these cars set out, and every car set out and in, would it not, following your plan?

A. It would be an attempt to provide for the terminal handling under the specific allowance made for stopping and starting, although, as I have already stated, the terminal handling is taken care of in another place.

Q. It occurred to me at one time that probably they were confusing that stopping and starting also with the terminal handling in the division: is not that taken care of?

A. Yes, sir.

Q. And this is merely the terminal handling between the divisions?

A. Yes, what you might call "on the road".

In that connection I would like to say before we get away from that, that we consider an allowance of four stops of the local train to one stop of the through train, as being the maximum that could possibly accrue to the local train for the stopping and starting expense.

Q. I think Mr. Ludlam, subsequent developments have proved that it was the maximum.

A. The same remark would apply to the allowance which we made of two terminal handlings for the cars on the local trains. We thought that would be the maximum that could possibly be reached.

Q. Mr. Gray, at page 704 of his testimony, in criticising the use of the car mile as a factor for "Maintenance of Way" gives several reasons why in his opinion it is not a sound factor and then stated: "A further inclusion of caboose mileage only accentuates this difference."

5193 I wish you would state if the caboose mileage is included in your car mile statistics, and if so, where it is.

A. The caboose mileage is included, and the caboose mileage is included in order that the maximum expense of operating the local trains might be ascertained.

The average number of cars in the local train is 16.6, including the caboose; 15.6, without the caboose; whereas the average number of cars in a through train, including the caboose, is 33.2; without the caboose, 32.2.

Consequently, if you eliminated the caboose, the mileage would be in favor of the local train. That is, it would tend to reduce the cost of the local train. By adding one car to a train that otherwise would consist of 15.6 cars, you increase the proportion of the car mileage of that train to the total car mileage, more than you do the mileage of the train that carries 32 cars, by adding a car.

Q. So if there is any error in including the caboose mileage there, it is an error that would operate against the local train and consequently against the state traffic?

A. Yes, sir. I would not say it was an error, but the result of including the caboose mileage is that it operates to increase the cost shown by us of handling the state freight.

Q. Mr. Gray seemed to intimate it was an error: I wish you would give your views about that.

A. Well, the caboose is a necessary part of the train, and in attempting to distribute the cost between the two trains, the
5194 local and through, I think you should consider the elements of those trains.

Q. Mr. Gray, at page 719, and Mr. Ward, at page 621, criticise your use of train mile for "Other train expenses" and argue that on account of such items as "casualties"; "personal injuries occurring on trains"; "wrecks"; "stock killed"; "damages to persons and property"; "flood damage"; "road signal men"; "crossing watchmen";

2269

and "freight car lubrication", being included in that, the train mile is not a proper factor:

I wish you would state if you think the train mile is a proper factor, in view of what they have brought out in regard to what is included in that account?

A. I see nothing in the points raised by Mr. Gray or Mr. Ward that would change my view of our distribution being the correct distribution. Certainly there could be no question as to the majority of those items, and such question as there may be, if those items were divided on the car mileage basis, instead of the train mileage basis, it would tend to reduce the cost of the local train service, and therefore any criticism that is made of the method which we have adopted, would be to the effect that we had charged too much to the local trains, which would ultimately have the effect of increasing the cost as shown by us of doing the state business.

Q. Some of those items have been discussed by other witnesses, such as "stock killed"; "road signal men", and others:

5195 I wish you would state, in view of what they have brought out, in regard to these different items, why the train mile instead of car mile or any other factor, is proper.

A. In the case of "signal men", the signals are maintained for the operations of the train and not for the individual unit of the train.

In the case of "wrecks", if the train was wrecked, it would apply, I should think, rather to the train than to the unit of the train.

In the case of "lubrication", that would apply, probably, more specifically to the unit in the train than to the train itself, but inasmuch as the through train is a much longer train than the local train, the distribution of the lubrication on a car mileage and engine mileage basis would tend to reduce the cost of the local train as compared with the division used by us.

The "Highway crossing watchmen", which is also included in that expense, would apply to the train rather than to the unit of the train. The watchman is maintained to signal pedestrians and road vehicles against the train and not against the individual car of the train, without regard to the length of the train.

"Stock killed" might be allocated in many instances to the individual train, but some of the stock that is killed—and a considerable proportion of it—you could not locate the specific train that caused the accident.

Q. You could not very well allocate it to a car.

5196 A. No.

Q. I believe Mr. Johnson worked out some way of allocating it to trains, but I do not think he has as to the car.

A. For all those items I think, as I said before, that a train mileage basis is fair and equitable, and any way, in my judgment, in which it is not equitable, it is against the interest of the State in this controversy.

Col. MOORE:

Q. If you had divided that on a basis of train instead of train miles, what effect would it have had on the expense of local trains?

A. I don't know just what effect it would have had.

Q. Would it not have increased the cost of local trains?

A. I don't know just what effect it would have had, but the train mile basis, to my mind, is more equitable, for the reason that a train running 200 miles is much more apt to be the cause of any one of these charges, than a train running 50 miles. Therefore the train mile basis would seem to me more equitable than a train basis.

Q. If Exhibit "I" shows it was divided on the train basis of the number of trains, that would impose a larger cost on local trains, would it not?

A. I do not think Exhibit "I" shows that. Exhibit "I" does not show the local trains.

Q. How about "33% of the trains were local; 116 out of 3,874"—if I read these figures correctly: that would be about 33%. You can you look at that table and see what per cent you get.

5197 A. If it was distributed on the number of trains it would increase the charge to the local trains.

Q. Is it not a fact and is it not shown by all the evidence in this case, that the local trains cause more damage to stock, for instance, than through trains; more casualty damage in the way of killing stock, than through trains?

A. I have not heard any evidence to that effect and I should not assume it.

Q. Also "personal injuries": do you know about that?

A. Only in a general way, Mr. Moore.

Q. The testimony shows that local trains travel faster between stations than a through train, does it not?

A. There has been some testimony that in between stations the local trains travel faster than the through trains.

Q. If that is true, in view of that fact and also of the switching service done by local trains, is that not more likely to inflict more personal injuries and casualties?

A. I should say that it would be apt to cause more personal injuries, but I would not say casualties other than personal injuries.

Q. Running more rapidly through the country, between stations, would result in more largely killing stock, would it not?

A. No, sir, I don't think so. I think that the through train, as a rule being a longer train, a through train is not as apt to stop as quick if a cow gets on the track as the local train.

5198 Q. The velocity of the train has some effect?

A. Yes, but I think there is very little difference in velocity between the average speed of the through train and the maximum speed of the local train.

Judge HILL:

Q. I do not believe Col. Moore has quite correctly stated the testimony: there is some testimony that the local runs faster—and I believe some that it does not—but I believe that the great weight of the testimony is that it is about the same between stations, about twenty miles:

Is that a matter that you have any personal knowledge of, to speak of?

A. Only in a general way, but my answer was based on that and I think I so stated, that the average speed of the through train would be approximately the same as the maximum speed of the local train.

Q. Mr. Moore's questions have indicated that that account ought to be divided on the train basis: I wish you would express your opinion about that. It is a new factor to me.

A. I did that. I have already expressed my opinion that the train basis would be an erroneous basis, for the reason that you would then be charging against a train that ran 50 miles the same amount you would against a train that ran 200 miles.

Q. The proper way to reach it would be the train miles?

A. I think that is the most equitable way of reaching those 5199 items included in that specific account.

Q. Mr. Gray, at pages 730 and 734, and probably in other places, refers to the fact that in your exhibits you drop the locomotive mileage. I will read you from page 730:

"Q. Will you take up that exhibit before you and begin with the beginning of it and call attention to such parts of it as you desire and state your views about them?

"A. In the deductions throughout this theory, starting in with "Maintenance of way and structures" the car mile basis has been adopted entirely.

Why the locomotive mileage has been dropped, although used in freight statistics, it is hard to understand; especially as the proportion of locomotives to cars is very much greater in passenger than it is in freight."

And at page 734:

"I want to say that it is not an over-statement to say that in the shops 90% of the tools are provided for and are used in connection with locomotive repairs."

Then he goes further in the matter of repairs—the expense of repairs to locomotives, and I think in some other place, he criticises your exhibit for having used that for freight statistics and not in the passenger, if I recollect correctly:

I wish you would state why you have dropped that locomotive mileage, why you have done so.

A. In arriving at the passenger expenses, we distributed the expense direct to the passenger. We made no separation between the two classes of trains, local and through. Consequently, there was no object in distributing the expense to the locomotive because if we had done so, after distributing it to the locomotive we would have had to redistribute it to the passenger. So we distributed it direct to the passenger.

5200 Of course, all of the locomotive expense in the passenger service is incurred for the passenger business.

Q. You distribute that, as I understand it, on what is done behind the locomotive?

A. Yes, sir.

Q. In doing that, Mr. Ludlam, have you taken care of the locomotive expense and everything else? I want to understand whether that system would take care of all those items which Mr. Gray has referred to in his testimony?

A. Yes. We have distributed all the passenger expenses to the passenger business, whether incurred in direct connection with the locomotive or other parts of the passenger service?

Q. There is another place here where Mr. Gray seems to misunderstand your testimony, page 810 and 850: at page 810 he says:

"My judgment is that the car mile basis in a case of this kind, while it presents objections (as do all arbitrary sub-divisions) it does not present them in the same degree or to any such degree as the further attempt to divide the expenses attributable to any one state for car repairs between through and local on a car mileage basis, because there now enters into the equation a distinction as between short and the long haul."

Now at page 850, where he is referring to a car mile division between states:

"I think that a division of that kind between states is equitable and I don't think that a division of that between local and through trains is equitable, because it does not take into consideration the elements of difference brought about by the short and long haul."

5201 I will ask your opinion about that criticism of your exhibit and whether or not you have taken care of the short and long haul in that?

A. The criticism is not based on that because it is self-evident that any man who says that the car mile does not take into consideration the long haul or the short haul, either does not understand what the car mile means, or else does not understand what he is talking about.

Q. How does a car mile operate to take that in?

A. If a car moves one mile, that makes one mile; whereas if that car moves two miles, it makes two miles; if a hundred miles, that car makes one hundred car miles. Consequently, the element of distance is the most important element he does consider, and is the basis of the car mile.

Q. Mr. Ward, at page 613, criticises the method used by the state in apportioning the expense in terminals, of counting cars in and counting them out, and says that the proportion chargeable under this method, to through service, would be much greater than is actually the case, and adds this:

"The opinion of myself, or any other operating official, as to the excess cost of handling state over interstate business is on the basis of actual freight and not on the basis of the number of cars passing through the yards."

I presume from Mr. Johnson's testimony this morning, that is very likely the foundation for his distribution of that expense on the ton basis, in his exhibit No. 56.

I will ask you what is your opinion of that basis which is
5202 used here in this exhibit, on the testimony of Mr. Ward,
which I have read to you?

A. You are asking what I think of the basis used in Exhibit 56?

Q. Yes, which I assume to be based on Mr. Ward's testimony,
which I have read to you.

A. I think the basis is wrong, because it assumes that a ton of
freight which moves 70 miles would have the same terminal service
as a ton of freight that moves 224 miles.

Q. Those are the respective lengths of haul in this case on the
Iron Mountain, I believe?

A. Of state and interstate.

I think I have already testified that, speaking generally, every ton
of freight that passes through a terminal gets some handling at
that terminal. I think also it is a matter of general railroad knowl-
edge that the large and expensive terminals are required more and
used more for the through business than for the local business.

Q. What effect would that length of haul have upon the propo-
sition which you have referred to?

A. The effect, as that principle is used in exhibit 56, is that you
charge as much for a terminal handling to the ton that moves 70
miles as you charge to the ton that moves 224 miles. You fail to
take into consideration the most important element in distribut-
ing all expenses, and that is the use which is had from the expense
incurred. The ton of freight that moves 70 miles, will, of
5203 course, not have the same use of the terminals as the ton
of freight that moves 220 miles. Therefore, when you at-
tempt to distribute your terminal expense on the tons handled, you
arrive at a false conclusion and your figures are correspondingly
unreliable.

Q. In that connection I might call your attention to what I be-
lieve to be evidence in this case, that the average local freight run
in Arkansas is 70 miles and that of the through is 98: I think that
is correct—it is approximately correct.

A. The average run of what?

Q. Of the local trains is 70 miles and the average run of the
through would be 98 miles: what effect would that have upon this
question, in terminal handling?

A. Well, there would be more terminal handling charged to the
through trains than the local trains, because they run farther.

Q. The haul for interstate freight being 224 miles, would take in
two terminals and probably three?

A. The average haul of interstate freight is shown on exhibit 26
to be 218 miles.

Q. That would take in at least two, if not three?

A. The average haul of the interstate freight being 218 miles,
would use at least three terminals, and possibly four. That is, the
terminal from which it started; a terminal, we will say, at the end
of 100 miles; another at the end of 100 miles, and a terminal at its
destination.

5204 Q. One of those four would be outside of the state, on the interstate?

A. Yes, except where the terminal happened to be located right at the borders of the state.

Q. That situation, I assume, makes manifest the incorrectness of that ton theory on that, without any further discussion?

A. It seems so to me.

Q. Now, in Exhibit 56, or Exhibit 26—I am calling your attention to Exhibit 26, you get the tons with the lap-overs included—ton miles I presume that is?

A. Yes, sir.

Q. —in the use of tons for this purpose, assuming the same yard engine expense for the haul of the state of 70 miles against the interstate of 218 miles: I wish you would state the effect of that.

This is the "yard engine" expense and they have used in Exhibit 56, the tons, and these tons, as I understand it have these horrible "lap-overs" in it: I want to know the effect of that upon this particular item of "yard engine" expense, when you consider that the state haul is 70 miles and the interstate is 218 miles.

A. Exhibit 56, in distributing the "Maintenance of Equipment" expense—that is, the proportion applicable to the "yard locomotive mileage" to yard engines, and in distributing the terminal
5205 and yard expense, uses the tons of freight as shown by Exhibit 26, which are determined from the auditor's figures, which would be subject to the criticism of the inaccuracies caused by the lap-overs from September into October, October into November, or even a longer period as those lap-overs extended over; whereas the distribution as made by us of both those items is based upon the reports, the actual yard engine mileage shown by the reports, during the month.

In other words, the physical operations as compared with the auditor's figures.

If you ask my opinion as to what the effect would be, I would say I do not think those lap-overs would affect Exhibit 26 materially, if all worked out.

Q. If they are as horrible as they have been painted in this testimony—our friends on the other side are using them this time—is that a fact?

A. The tons as shown by Exhibit 26 are used in distributing these two items of expense to which we have referred in Exhibit 56.

Q. I do not suppose they are as horrible as some of their people might imagine, or I am satisfied Mr. Johnson would not have used them.

A. If you want my opinion, I would say that somewhat over-worked word "negligible" would apply more specifically to the variation that would exist between the physical movement and the movement as shown by Exhibit 26, than to any other quantity to which it has been applied in this case.
5206

Q. In section 3 "Transportation expenses," subdivision (b) in Exhibit 56, to which I wish to call your attention, is what I

understand to be the yard and terminal expenses divided upon the ton basis.

I believe you discussed that in connection with this other item: what do you say of its use there?

A. I think I have already covered that. I think it is wrong to distribute the same yard and terminal expense to a ton of freight that moves 70 miles, as you would distribute to a ton of freight that moves 222 miles.

Q. In other words, this applies to the matter you are discussing now, as well as to the one you discussed heretofore?

A. Yes, sir. It is also based on the tons as shown by Exhibit 26.

Q. What is the practical effect of that swelling of the division of expense there over against the state, in those two items when you consider this "Maintenance of Way" expense in Exhibit 56, which is switched from your basis on to the other head in the Railroad exhibit?

A. The effect of distributing the "Maintenance of Way" expense as an overhead expense against the direct expenses, and then charging your direct expenses so that you apportion as much expense for maintenance of yard locomotives and for terminal and yard expenses, to a ton of freight that moves 70 miles as you 5207 apportion to a ton of freight that moves 222 miles, is to improperly and excessively load the cost of the ton of freight that moves 70 miles.

I am speaking now of the effect of doing that, not as to the propriety of so distributing the "maintenance of way" expenses.

Q. While we are on that subject, I want you to discuss that question and I will ask your opinion of it now.

In Exhibit 56, made up by the Railroads—which I have somewhat facetiously called a "caricature" of the State's exhibit—they adopt many of the bases of the state, but in "Maintenance of Way" they have added that, as I understand it, to the general expenses, and distributed that item of expense all through the other:

I wish you would express your opinion on that.

A. I think it is wrong in principle; that there is no accounting practice or procedure that would justify it. It is a well known rule of accounting that you should distribute those expenses that are specific against the use which is had from the expenses incurred.

In the case of the "Maintenance of Way" expense, they should be distributed, in my judgment, both the proportion which is direct and the proportion which is indirect—which has been referred to as being from 75% to 90%—against the use which is made of the "Maintenance of Way," and the use which is made of "Maintenance of Way" is to run trains.

5208 If it is true that only 10 or 25% of the "Maintenance of Way" expenses apply specifically to the operation of the trains over the track, then that 10 or 25%, if it could be determined, should be apportioned specifically against those trains that cause the damage, and the remainder of the "Maintenance of Way" expense—which would be the indirect expense of "Maintenance of Way"—

should be apportioned over the direct expenses of "Maintenance of Way".

Q. And that was done?

A. The result of our distribution approximately does that.

Q. I believe you have heretofore testified that in your accounting experience you have had a great deal of experience in auditing railroads: did you ever come across a proposition like this that distributed things like "maintenance of way" through all these various accounts?

A. No, sir, the "maintenance of way" is a specific expense and that would be one of the elements used to distribute "general expenses".

There is a certain element of your "general expenses" that applies to your "maintenance of way" expenses. A certain proportion of your President's and Vice President's salaries, the clerks in the auditor's office, all apply to the "maintenance of way" expenses, and the "general expenses" would be distributed over all the elements of expense, which, as I stated, would include the "maintenance of way" expenses, as well as the "maintenance of equipment"; "traffic" expenses; and "conducting transportation" expense, but there is absolutely, as I see it, no possible reason for adding your "maintenance of way" expenses to your "general expenses" and then attempting to distribute those over the balance.

In that way you do not apportion any of your "general expenses" to your "maintenance of way" expense.

Q. Why is that?

A. Because if you add your "maintenance of way" expense to your "general expense", then you apportion them all over "maintenance of equipment"; "traffic expenses"; and your "conducting transportation expenses", which are all that are left of your operating expenses.

I am sure no man who is familiar with railroad procedure, would claim that the officers of a company—and by "officers" I mean the general officers, higher executive officers—have nothing to do with the "maintenance of way".

I can imagine, for instance, in the case of the panic in October, 1907, the President of this Company wiring from New York to reduce the expenses, and probably the first men that were laid off were some of the section hands, who would be charged to "maintenance of way".

I am sure the records of the Company, if carefully searched, would show very explicit instructions from the higher executives during October, November and December of 1907, affecting the "maintenance of way" department.

5210 Q. Take the other items in "general expense" outside of the higher executive officers; take your legal department—claim department, auditor's department, and various items going to make up "general expenses": do not all of them have more or less relation or duties to perform in regard to the way and maintenance?

A. Yes, they all have something to do with the "maintenance of

way" expense and it is proper that those expenses should be distributed over the "maintenance of way".

Q. As I understand you, under this "grand, gloomy and peculiar method" that our friends have invented, the "maintenance of way" would escape all of that—all portions of that?

A. Under their method the "maintenance of way" would all be distributed against the other operating expenses.

Q. Now, coming to the practical end of that proposition on this matter: what is the effect when you come to carry out such an abnormal method—as we view it—to distribute it in connection with such abnormalities—as we view them—as is done in "terminal expenses": what is the practical effect of that?

A. On the basis followed by Exhibit 56?

Q. Yes.

A. The practical effect is to increase the cost of the state freight, as shown by Exhibit 56.

In the first place, you improperly apply certain of so-called direct expenses—specifically illustrated in the case of repairs of yard locomotives; in the case of handling and in the case of expense of yard and terminal—by apportioning, as I have said before, as much of that expense to a ton of freight that moves only seventy miles, as you apportion to another ton of freight that moves two hundred and twenty-two miles.

If you take all of your "maintenance of way" expenses and distribute them over your direct expenses, the proportion that would apply to those specific items, you are also—in the case of your "maintenance of way"—charging as much to a ton that moves 70 miles as you are to a ton that moves 222 miles. That is, to the extent that the repairs of yard locomotives and the expense of yard terminals represent the total expense over which you distribute your "maintenance of way" expenses; you are claiming it costs as much to maintain your property to move a ton of freight 70 miles at it does to maintain your property to move a ton of freight 222 miles.

Q. Are there any other matters in that connection which I have not called your attention to? I want to go into it thoroughly and then pass on to something else.

A. I think that explains the inaccuracy of the principle.

Q. Take another illustration of that: in your exhibit you use 35% for stopping and starting—

A. Not 35%.

Q. 21½% for starting and stopping and 13½% for terminal. Under some testimony introduced by the railroads in rebuttal, the evidence tended to show that that ought to be very much increased, up to something like 58 or 60%: I believe Exhibit 56 is based on that—

A. Fifty-five per cent, Exhibit 56.

Q. The testimony in sur-rebuttal tends to show that the 21½% and 13½% used by you, is much too high:

I will ask you, assuming now that your 35%, for the two, is correct, as against 55%, what effect would that have on swelling

an item like that and then using the overhead method of apportioning the "maintenance of way expense"?

A. In our apportionment of the expense any variation between the percentage of $21\frac{1}{2}\%$ allowed by us for starting and stopping, or any variation in the percentage of $13\frac{1}{2}\%$ allowed by us for terminal handling, between those figures and the actual, would affect only the distribution of this item of expense to the extent that the per cent as used by us might be proven to be inaccurate, but under the method adopted in Exhibit 56, it would not only increase that specific item of expense, but it would correspondingly erroneously distribute the proportion of the "maintenance of way" expenses that are distributed over such items as are applied direct. That is to say, if they charged under their distribution twice as much to local trains on account of starting and stopping and terminal handling, then they would correspondingly, under their method, charge twice as much "maintenance of way expense" as they should charge.

Q. If you had any error in that your error would affect only "general expenses"?

5213 A. Our error would only affect the specific item and "general expenses".

Col. MOORE:

Q. How about supervision?

A. And supervision which was distributed over the direct charges—supervision of "maintenance of equipment" department.

Q. It would affect everything distributed over direct charges?

A. Yes. Consequently, it is apparent that if the total of your indirect which you distribute is \$50,000, there is not a chance for as large a mistake to occur through such distribution as where the indirect that you distribute is half a million dollars, because the effect under our method, as you will see, of an error of one per cent. would result in a very small erroneous charge; whereas an error of one per cent, under your method, would result in a very much larger ultimate discrepancy—when I say "you" I mean the railroad.

Judge HILL:

Q. In that connection, there is another item of "maintenance of way" itself that there has been a diversity of testimony about:

In your exhibit you allowed $2\frac{1}{2}$ for a locomotive as against a freight car:

The railroad put in testimony here tending to prove that that was too small and should have been five or six, if I remember their testimony correctly.

A. Three to five is the highest I saw in the testimony.

5214 Q. In the testimony of the state, in rebuttal, I think one of the witnesses testified it ought not to be more and others testified that 2 or $2\frac{1}{2}$ would be sufficient. That is a subject that the "learned doctors" disagreed about.

What effect would an error like that have—suppose you had made an error in that, either way?

A. Inasmuch as we estimated that all engine miles are equal to

2½ car miles and applied that to both local and through trains, whatever element of difference there may be between 2½ times and the actual times, and the actual excess of the locomotive over the car, would affect our distribution only to the proportion that each of those items—the local and through—bore to the total.

For the purpose of running that out in the case of this "Maintenance of way and structures" I made a calculation estimating the one engine mile as being equal to five car miles, and I found that the ultimate return on the property as a result of doing that—in the case of intrastate freight— was reduced from the figure of 1093 per cent, as shown by Exhibit "O", to 1085 per cent.

Q. A difference of what?

A. 8/100 of one per cent.

Q. There is another item in the case that there has been much evidence upon and a wide diversity of opinion:

You use four stops for the local against the through and there has been a great deal of testimony that that is excessive; probably the weight of the testimony would indicate two times:

5215 Assuming for the sake of the illustration that that would be two times and also that the switching would be 25, 30 or 40 percent instead of 50 percent: that would cut quite a wide swath in those figures, would it not?

A. It would reduce the proportion of the expenses charged to the local trains.

Q. And consequently to the state, ultimately?

A. And ultimately it would tend to reduce the cost of doing the state business worked out to its final conclusion. I have not made any figures, however.

Q. Under your system if there has been any error in your statistics against the state there in using four to one, instead of two to one, and using 50% for switching instead of 25%, that error would be confined, as I understand it, to "Maintenance of equipment" and to a small percentage of "general expenses":

Now, what would be the effect of that, under this peculiar method that these gentlemen have devised, of adding the "maintenance of way" to the "general expenses"? I do not mean in dollars and cents.

A. Any inaccuracies between the assumed basis in determining expense of maintenance of equipment and the actual basis would carry not only the mistake in expense of "maintenance of equipment" resulting from such inaccuracies but also the corresponding proportion for "maintenance of way" expense.

5216 Q. What is the percentage of "general expenses" in this case? As I recall it, it is about 4%.

A. "General expenses" for the six months ending December 31, 1907, charged to the freight account, amount to \$132,218.24 against—

Q. What percent is that of the whole? I just want the percent?

Mr. JOHNSON: About four and one-half percent.

A. —total expenses of \$3,073,843.40. That would make the "general expenses" about four per cent of the total operating expenses.

Q. That is on the freight side?

A. That is on the freight only.

Q. Mr. Johnson has figured it out and says it is about four and one-half percent.

A. That would be about right.

Q. Now, to sum up that: if you made an error on this starting and stopping and switching, and what has been called the "arbitraries" that error would, to that extent, disturb the true relation of "maintenance of equipment" and to a certain extent of $4\frac{1}{2}\%$ of "general expenses" and no more.

A. Other than the "Supervision and general" of the different specific departments.

Q. I understand that is included in your exhibit in that "Maintenance of equipment" account, is it not?

A. Yes, but that in turn is distributed over the direct expenses of that particular department.

5217 Q. But that is all confined in that department?

A. Yes, sir. The "Maintenance of way" expenses charged to freight for the six months ended December 31, amounts to \$553,395.11 as compared to the total operating expenses charged to freight of \$3,073,843.40. Approximately 18% of the total operating expenses applicable to the freight are for "Maintenance of way and structure."

Q. Now, turn to the passenger side of that: I believe they follow that same method in the passenger side of it, don't they?

A. Yes. The total "general expenses" for the six months ended December 31, 1907, charged to the passenger amounts to \$160,767.19 and the total passenger operating expenses for the same period amounts to \$1,678,039.98, making the "General expenses" approximately 10% of the total operating expenses.

Q. What is the "Maintenance of way"?

A. The "Maintenance of way" expense—the expense of "Maintenance of way and structures" charged to passenger service during the six months ended December 31, 1907, amounted to \$501,281.40, as compared to total passenger operating expenses of \$1,678,039.98, which would make the proportion of the "Maintenance of way and structures" expenses to the total operating expenses about 30%.

Q. About 18% of the freight and about 30% of the passenger for maintenance of way expense?

5218 A. Yes, sir, of the total operating expenses, applicable to the freight and passenger.

Q. And about $4\frac{1}{2}\%$ on "General expenses" for freight and about 10% for passenger?

A. Yes, sir.

Q. What particular significance would that have upon this method of apportioning that "Maintenance of way"?

A. To my mind they illustrate very forcibly the inaccuracy of that method. I might say that they illustrate that under that method any mistakes that were made in the direct expenses would affect a much larger proportion of the total expenses than if the distribution of "Maintenance of way and structures" had been made in the man-

ner that I consider proper, that is, on the basis of the use made of the property.

Q. Then in this case, as we see it, there are a great many errors in this Exhibit 56 as to the various charges—conceding for the sake of the argument that we are right on that, how far reaching would this method of accentuating those errors go? I do not mean in dollars and cents, but just as a general proposition?

A. I think the Exhibit is altogether unreliable for obtaining any valuable information or reaching any conclusion that would be of value.

Q. You have illustrated these applications on the unreliability of it dependent on variable factors: now, suppose it was alright, that these various arbitrariness were right: Is that a method that
5219 gets at the true result, aside from these matters that you have called attention to, when you come to a method of getting as near as the actual results as possible in distributing railroad costs?

A. I think the methods followed in Exhibit 56 are wrong.

Q. What are your reasons for that, leaving aside these illustrations that you have taken: are they so full of manifest errors as we take it—

A. I think the principle of attempting to distribute your "Maintenance of way" expense over these other expenses is entirely wrong wrong in principle and wrong in results, and the results, as I have already stated, are—the errors in the final results as I have already stated, are increased by any inaccuracies in the division that is made in the other items of expenses.

Q. Mr. Ward says on page 622:

"It seems to be the case that up to this point in this exhibit the endeavor of the state's accountants has been to determine what is a proper method of distributing train and car costs between local and through trains. And when they have done that according to the method adopted, they undertook by taking into account the tonnage of state freight handled on local and through trains respectively, to ascertain the ton mile cost of handling such freight; and have assumed that the cost of handling a ton mile of state freight on a local and on a through train is the same as that of handling a ton mile of interstate freight on the same train."

Is that a correct statement of your exhibit?

A. Yes, we assume that after we have gotten your train costs so far as the train costs themselves go, the cost of handling the
5220 ton mile of state freight is the same as the cost of handling a ton mile of interstate freight.

Q. At page 639 of Mr. Ward's testimony, in discussing the passenger side of your exhibit, he states this:

"The inclusion of those items of yard service, wages of train and engine men, fuel and other supplies, on a car mileage basis, is wrong. It is unfair, and charges too much to the through service, and not enough to the local service, and to the local trains on which are carried the state passengers."

In various other places in the testimony of Mr. Ward—I will

not take the time to give you the page—he criticises your passenger exhibit on the basis of the through and the local service.

I wish you would explain that.

A. We make no segregation of the passenger business between through and local trains. Our passenger expenses are divided between the coach, Pullman, mail and express service.

Q. Mr. Nay has made a statement here—you can get it more quickly than I can give it to you by looking it over, page 443—as if you had used a car mile there: I wish you would explain that. It seems to be a misapprehension as to the factor which you have used.

A. (After examining record.) Mr. Nay says: “They have divided the expenses of terminal handling of cars on a car mile basis.” He thinks we should have used the same basis for dividing the repairs due to terminal handling that would be used in dividing repairs of yard locomotives.

5221 We attempted to divide it on the basis set forth in our exhibit very fully, that we thought was fairest and most equitable, and I will just say in answer to Mr. Nay’s criticism that if we had used the basis he suggests that we would have charged local trains, in the case of that specific expense, with only 19.46%; whereas, under the method we had adopted—and we adopted it because we thought it more equitable—we did charge the local with 26.46. The method we adopted was more unfavorable to the state than the method that Mr. Nay says he should have thought we would have adopted.

5222 JUDGE HILL: Mr. Ludlam, we were discussing Mr. Nay’s statement wherein he criticised your use of the car mile in the yard and terminal expense, was it not?

A. It was the charge we made to the local trains for terminal expense. He said instead of having made it on the car mile basis we should have made it on the car basis, the same as we did the yard and terminal expenses.

In that connection I might say the same result is accomplished by our method of multiplying the car mileage by two to get the number of terminal handlings that the cars in the local trains would have.

In other words, we use the car mile only as a factor to determine the actual terminal handling or the approximate terminal handling.

Q. He seems to misapprehend the way in which you have handled it?

A. Yes, sir, he apparently does not understand the use we have made of the car mile.

Mr. MOORE:

Q. You mean the same result in money would be obtained?

A. No, sir, I mean to say the same principle would be obtained. It is reduced to the basis of car handling, taking the car mileage and switching each car in the local train has two handlings to one handling of the cars in the through train.

5223 Q. You do not mean your method would be equivalent in respect of result of a division on the basis of the number of cars, do you? Or that it is the same in principle?

A. It is the same in principle but as your total expenses are different the rate per car would not be the same.

Q. Would the percentage be the same?

A. Not quite. There is a slight difference.

Q. Is it not more than a slight difference, Mr. Ludlam?

A. 26.43% of the total terminal handling is assigned to the local train under the method adopted by us. Whereas, in the case of the cars handled in the terminals the proportion assigned to the local trains is 19.46%. Of course, we are dealing with two different elements, you understand?

Q. I understand that.

Judge HILL (resuming):

Q. Which plan reaches most nearly, in your opinion, the actual facts: that suggested by Mr. Nay or the way you have followed in that exhibit?

A. The plan followed by us in our exhibit is the plan that Mr. Nay suggests would be the proper way to do it. The trouble is that Mr. Nay assumes that we have not done it on a car mileage basis and he says it should be done on a car mileage basis.

We have equalized our car mileage basis to a car basis; so we have done it on the plan Mr. Nay says would be the better plan but he does not give us credit for having done it that way.

5224 Col. MOORE:

Q. Would it not be a simpler method of arriving at that result to take the car miles, instead of doubling in order to equalize what the cars would produce?

A. You have no way of determining the method of handling the cars on local trains except as you determine it on a car mile basis.

Q. Don't you think this exhibit is plain enough, that a man of Mr. Nay's intelligence could understand the basis of your division?

A. Yes, sir, we think the basis is clear enough for any man of ordinary intelligence to understand it.

Q. So it is something else than want of understanding on Mr. Nay's part, do you think?

A. I think he simply got mixed on it. I think he could easily have been straightened out. Sometimes even the brightest men get twisted on the simplest and plainest things.

Judge HILL:

Q. On page 467 I wish to read an excerpt from Mr. Nay's testimony. It reads as follows:

"My judgment would be, based on a good many years' experience with Arkansas conditions, that the proportion of intrastate tonnage to interstate tonnage in October would be less than during the entire six months, or during an entire year, for the reason that there is an excess of interstate tonnage or shipments handled during that month."

I wish to call your attention to Exhibit 26 and Exhibit 5 and ask you to state whether Mr. Nay's statement there is correct, as shown by the exhibits of the railroad in this case.

5225 A. Exhibit 26 shows that on the ton mile basis the state freight in the month of October amounted to 8.15% of the total ton miles; whereas, Exhibit 5 shows that the state ton miles for the six months ended December 31st, amounted to 7.25% of the total ton miles.

When considered on a ton basis Exhibit 26 shows that October amounted to 21.15% on the state business and Exhibit 5 shows that for six months ending December 31st, the state per cent was 19.98%. Showing that both in the case of ton miles and in the case of tons, the state proportion of the total business was larger in the month of October than it was for six months.

In other words, just exactly the reverse of what Mr. Nay's many years' experience in the state of Arkansas led him to believe.

Q. That is the opinion against railroad statistics?

A. Yes, sir.

Q. On page 483 and also on page 490 of Mr. Nay's testimony, he makes certain statements about the passenger division of expenses between local and through trains: I wish you would explain that?

A. The remarks of Mr. Nay referred to on pages 483-484 are based on his proposition that it would have been more correct for us to have divided the passenger business between the local and the through trains as we did in the case of the freight business. I think

Mr. Nay's comments, however, were answered fully when we 5226 referred him to the passenger train exhibit.

Q. Of Mr. McPherson?

A. Yes, sir, Mr. McPherson's exhibit 46.

Q. Now, what are you going to do with the Cotton Belt?

A. In the case of the Cotton Belt, the trains were all local. Not even a small proportion of them were through trains, as in the case of the Iron Mountain. So, of course, his remarks do not apply at all to the Cotton Belt?

Q. Mr. Johnson at page 884 says:

"Q. I notice in ascertaining the engine miles for the purpose of making the division under that heading, they have assumed 270,564 engine miles and on the next sheet speaking of maintenance of locomotives under "Maintenance of equipment" there is an enumeration of 130,150 engine miles for yard locomotives:

Is that omitted from the figures to which I first called your attention under the head of "Maintenance of way"?

A. The item of 270,564 engine miles as shown in the state exhibit K under the heading of "maintenance of way and structures" is road engine miles. While under "Maintenance of equipment" yard locomotive mileage is shown to be 130,150.

This 130,150 miles has been omitted from the engine miles or wheels taken into account under "maintenance of way and structures."

The yard engines are incurring an expense in maintenance of way, maintenance of tracks, and the use of structures to at least the same extent as the road engine mileage is; and if the wheelage basis is to be considered a reasonable basis for dividing maintenance

of way and structures expense, I do not understand why the switch engine mileage should not be included in it."

I wish you would explain why it is your understanding it is not included in it?

A. Because the switch engine mileage was merely a feature
5227 of the transportation of the freight.

Consequently when we distributed all the expense of maintenance of way to the movement of the freight, there was no object in first apportioning it to the switch engine and then reapportioning it to the movement of the freight.

And, furthermore, there are no statistics and no way of determining the proportion of maintenance of way expenses that are attributable to the switching.

Q. Is there any significance to be attached to the omission of that engine mileage? Have you omitted any expense or items that should be included, by omitting to include that engine mileage in there?

A. No, sir.

Q. That is all taken care of on the other basis?

A. Yes, sir, and we think taken care of more correctly than if we had attempted to include a proportion of those expenses applicable to switching engines, and then in turn distributed that on the same basis as you attempt to distribute the other expenses.

Q. There is a simpler and better way to get at the same apportionment?

A. We think so.

Q. In Exhibit 56, passenger accounts, in a note on sub-division
8 there is this statement:

5228 "The company records also show that in October, 1907,
there were 2,188,495 passenger miles carried in Pullman cars and on the state's assumption that 25% of the passenger miles is intrastate traffic the division of passenger miles for October, 1907, may be made as follows:"

And then follows a calculation based upon that theory.

Mr. Johnson in his testimony has explained that and claims that substantial injury has been done to the interstate business by the omission of those passenger mile statistics, and applying the same to the intrastate and interstate passengers carried in Pullman coaches.

I wish you would explain, first how your exhibit was made and what investigation you have made since to see whether his contention is correct?

A. When we made our exhibit in this case we did not have the proportion of passenger miles which were carried in the Pullman cars during the month of October, 1907, or for any other of the six months under review.

The company's records did not permit of the ascertainment of that information divided between intrastate and interstate passengers. The only way that information could be made up was from the tickets themselves, which we were advised had been destroyed and undoubtedly they had been.

Consequently, after giving the matter considerable thought we decided to apportion all of the baggage car expenses and the dining car expenses and a proportion of the observation part of the café car expenses, which would be accessible to the Pullman 5229 passengers as against coach passengers, and then divide the total coach expenses so ascertained against the total passenger mileage, between the state and interstate.

On that basis the coach expense in the case of the Iron Mountain was found to be \$896,378.78.

This was represented by a total coach mileage proper on the basis stated of 751,229 miles.

In view of the figures produced by the company in this case, 2,188,495 passenger miles carried in Pullmans during the month of October (and I use this figure with the understanding it will be corrected) and a division made in Exhibit 56 between Pullman expense and the coach expense, but we have referred back to our figures and found that of 751,221 miles made by the coaches, there are 139,696 miles represented by baggage cars; 27,057 miles represented by diners; and there are 10,168 miles represented by café-observation cars; making a total of 176,921 car miles which would apply to the Pullman passengers as well as the coach passengers. The Pullman passenger, of course, using the baggage, dining cars and café cars equally with the coach passengers.

That leaves of the 751,221 coach miles shown by our exhibit, a total of only 574,308 coach miles which are applicable to the passengers carried in the coaches, plus their proportion of the baggage, diner and café-observation car.

5230 Apportioning those passengers on the basis of the state passengers and the interstate passengers carried in Pullman cars, I estimate that 18% of the total passengers carried in the Pullmans are state passengers and 82% are interstate passengers—

Q. If that does not interrupt your thought, I would like to ask you a question there.

A. All right, go ahead.

Q. You say your exhibit is 25% and 75%: why do you use 18%? Have you some basis for that?

A. We have made some figures from current operations of passenger trains in Arkansas, which would indicate that a percentage of 18% would be more nearly correct than the percentage of 25%.

In that connection I might say that in making our original exhibit we used 25% with the intention of not understating the state passengers carried in Pullman cars. We thought at the time that was a liberal estimate. But on examination we have made recently of the current operations it shows about 18% of state and 82% of interstate passengers—

Mr. MOORE:

Q. May I ask what period of time was covered by that recent investigation of which you speak?

By Mr. HAMILTON:

A. 94% of the trains for eight days for some twelve trains the reports had not come in.

Judge HILL:

Q. As I understand it, that is all that was possible. The custom of the company is to destroy the tickets as soon as they
5231 come in and they are properly listed.

A. Yes, sir. It is absolutely impossible to ascertain what proportion of passengers carried in Pullman cars during any part of the year 1907 were state and what proportion were interstate.

Q. One other matter in that connection: Do you recall Mr. Wright's testimony on that subject—and I think he is the only one who testified on that subject, for the state?

A. Yes, sir, Mr. Wright testified in his opinion the proportion of interstate passengers carried in Pullman cars would be somewhere between eighty and eighty-five per cent of the total. Of course, I mean passenger miles.

Q. You have taken 18%?

A. Yes, sir, in these figures we have taken 18%.

Taking both the average of Mr. Wright's estimate and the figures actually indicated by tests we have made of a few trains this month, as Mr. Hamilton stated 94% of all the trains for eight days.

Q. Proceed.

A. The result of this compilation would be to increase the charges applicable to the state passengers \$16,968.83 over the figures shown by our exhibit in the case of the Iron Mountain.

And \$3,597.00 in the case of the Cotton Belt.

That is for the six months.

5232 Q. There is one other thing you did not explain, but I interrupted you.

That is, what figures you have used for the total passengers carried in Pullmans for the month of October 2,188,495?

A. On the basis of our estimate made somewhat roughly that the figure given in Exhibit 56, 2,188,495 passenger miles carried in Pullmans during the month of October, is in error 33 1/3%. We have reduced that to 75% of that figure and based our estimate for the six months on that basis.

Q. Do you remember what percentage they actually showed on the Cotton Belt?

A. What percentage of what?

Q. Of the passenger miles in Pullman, in lieu of those 2,188,495? They have actual figures, as I understand it.

Q. The result of reducing the figures shown on Exhibit 56 in the case of the Iron Mountain from 2,188,495 miles one-third results in the figure I have just presented, being 12% of the passenger mileage carried in Pullman cars.

In the case of the Cotton Belt it is stated in Exhibit 60 that no record of the passenger miles made in Pullman cars during any of the months of July to December, 1907, is available; but for the month of June, 1910, which month is about an average of the six

months ending Dec. 31, 1907, the records of the company show passenger miles in coaches 2,574,781 or 90.26%. And passenger miles in Pullmans 277,764 or 9.74%.

5233 Q. You used 12% in the case of the Iron Mountain?

A. In the case of the Iron Mountain we used 12% and in the case of the Cotton Belt we used 9.74%.

Q. That is already in evidence in the statement and showing that these 2,188,495 is erroneous.

Just how great the error is, is to be determined by agreement later on and you have made a rough estimate from the data before you that it would be one-third, as I understand it.

A. Yes, sir, that the correct figures would reduce the figures shown here by one-third.

Q. And if that is more or less your calculations will change proportionately?

A. Yes, sir.

Q. The net result of that is that by this information you have obtained since your exhibit was made, there is an error here against interstate of \$17,000 in round numbers, in the case of the Iron Mountain; and \$3500 in round numbers, in the case of the Cotton Belt.

A. Yes, sir.

Q. That is favor of the interstate?

A. Yes, sir. Our exhibit was originally in favor of the intrastate.

Q. And now this error redounds in favor of the interstate to that extent?

A. Yes, sir.

5234-5236 Q. Have you figured out what effect that would have upon the returns on the property as made in your exhibits?

A. Yes, sir.

Q. What would that be?

A. In the case of the Iron Mountain it would reduce the intrastate return on the passenger valuation alone of .66%; and in the case of both freight and passenger it would reduce the intrastate return .4%.

Q. And now take the Cotton Belt?

A. On the Cotton Belt it would reduce the return from intrastate business on the passenger valuation alone .467%; and in the case of freight and passenger business both it would reduce the return from intrastate business alone .275%.

No cross-examination.

The defendants here rest.

And this was all the testimony offered in the case.

EXHIBIT TWO.

EXHIBIT No. 2.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Statement of Track Mileage St. Louis, Iron Mountain & Southern Railway, December 31st, 1907.

Line.	St. L., I. M. & S. Ry.			State of Arkansas.		
	Owued.	Leased.	Total.	Owued.	Leased.	Total.
Main Line	490.19	.....	490.19	305.29	.....	305.29
Main Line Connections.....	.58	.....	.58	.....	.....	.....
Potosi Branch	3.72	.....	3.72	.....	.....	.....
Belmont Branch	120.30	.....	120.30	.....	.....	.....
Jackson Branch	16.31	.....	16.31	.....	.....	.....
Cairo Branch	70.77	.....	70.77	.....	.....	.....
Doniphan Branch	20.50	.....	20.50	.....	.....	.....
Helena Branch	140.14	.....	140.14	.....	.....	.....
White River Division.....	312.41	.....	312.41	187.48	.....	187.48
Memphis Branch	88.94	2.17	91.11	88.94	*2.17	91.11
Iron Mtn. R. R. of Memphis.....	.....	1.07	1.07	.....	*1.07	1.07
Camden Branch	33.65	.....	33.65	33.65	.....	33.65
Camden and Alexandria Railway.....	32.48	.....	32.48	32.48	.....	32.48
K. & A. V. Ry.	170.64	.....	170.64	6.61	.....	6.61
L. R. & Ft. S. Ry.	162.06	.....	162.06	162.06	.....	162.06
L. R. Jct. Ry. ....	.59	.59	.59	.....	.59	.59
L. R. M. R. & T. Ry.	113.61	.....	113.61	113.61	.....	113.61
H. C. A. & N. Ry.	190.48	.18	190.66	45.89	.....	45.89
Ft. Smith Branch.....	17.63	.....	17.63	17.63	.....	17.63
Van Buren Bridge Line.....	.....	1.39	1.39	.....	1.39	1.39
Coal Hill Branch.....	3.87	.....	3.87	3.87	.....	3.87
Oulta Branch .....	.42	.....	.42	.42	.....	.42
River Track .....	.82	.....	.82	.82	.....	.82
Ouchita Branch	49.40	.....	49.40	49.40	.....	49.40
M. H. & L. Line.....	222.14	5.48	227.62	119.64	.....	119.64

Eudora—Gilbert Branch	37.49	.....	37.49	7.89	.....	7.89
Illinois Division	166.17	9.32	175.49	.....	.....	.....
St. L. S. W. Ry. ....	.....	110.32	110.32	.....	34.05	34.05
So. Ill. & Mo. Bridge .....	.....	3.91	3.91	.....	.....	.....
Total	2,464.72	134.43	2,599.15	1,315.82	39.27	1,355.09

•1.00 Mile

•1.07 "

} Arkansas Division Terminals in Memphis, Tenn.

Endorsed: Filed June 8th, 1910. W. P. Feld, Clerk. By W. Presley Feld, D. C.

EXHIBIT THREE.

5239

EXHIBIT No. 3.

5240

St. Louis, Iron Mountain & Southern Railway Company.

Statement of the Earnings and Expenses of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for Six Months Ending December 31st, 1907.

A. The Gross Revenue of the St. Louis, Iron Mountain & Southern Railway in the State of Arkansas, for the period mentioned above, as shown in Statement No. 1 is as follows:

	Amount.	Per cent of Freight revenue.	Per cent of All revenue.
Intra-State Freight	\$640,248.17	13.08%	9.59%
Inter-State Freight	4,133,210.33	84.41	61.92
Miscellaneous Freight	122,814.41	2.51	1.84
Total.....	\$4,896,272.91	100.00	73.35

	Per cent of Passenger revenue.	
Intra-State Passenger	47.03%	12.53%
Inter-State Passenger	31.96	8.52
Misc'l. Passenger	21.01	5.60
Total.....	100.00	26.65
Grand Total.....		100.00

The methods used in apportioning revenue to the State of Arkansas are fully set forth in Statement No. 2. Miscellaneous revenue has not been divided between Intra-State and Inter-State for reasons given in Statement No. 2.

That the methods used in apportioning revenue to the State are fair and equitable is shown by a comparison of the revenue assigned to the State with the revenue of the entire line and a comparison of various statistics relating to revenue, all of which is shown in Statement No. 3.

5241

EXHIBIT No. —.

B. The total Operating Expenses and Fixed Charges of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for the period mentioned, as shown in Statement No. 4, are as follows:

	Freight.	Passenger.	Total.
Maint. of Way & Struct.....	\$553,395.11	\$501,281.40	\$1,054,676.51
Maint. of Equipment.....	723,431.33	312,134.74	1,035,566.07
Traffic Expenses	88,734.42	53,276.08	142,010.50
Transportation Expenses	1,576,064.30	650,580.57	2,226,644.87
General Expenses	132,218.24	160,767.19	292,985.43
Hire of Equipment—Bal.....	179,191.46	Cr. 1,033.99	178,157.47
Dining Car Service—Bal.....	.....	1,183.90	1,183.90
Taxes	\$3,253,034.86	\$1,678,189.89	\$4,931,224.75
Rentals	162,945.69	59,202.49	222,148.18
	16,084.56	5,843.95	21,928.51
Grand Total.....	\$3,432,065.11	\$1,743,236.33	\$5,175,301.44

The basis used in apportioning expenses to the State of Arkansas and dividing same between the Freight and Passenger service are fully set forth in Statement No. 5.

Statement No. 4 shows the total Operating Expenses for the entire line and the percentage of the entire line expense charged to the State; and a comparison of these percentages with the percentage of traffic handled in the State, as shown in Statement No. 3, shows that the division of expense is fair and equitable when compared with the amount of business handled.

C. The assessment of the State Board of Equalization, for the purpose of taxation, is \$20,156,022.00, and if multiplied by two and divided between the freight and passenger traffic in proportion to the gross earnings of each class of traffic, would be as follows:

	Freight.	Passenger.	Total.
One-half of total Assessed Valuation being for six months	\$14,784,442.14	\$5,371,579.86	\$20,156,022.00
Six per cent interest on above	887,066.53	322,294.79	1,209,361.32
Seven per cent interest	1,034,910.95	376,010.59	1,410,921.54
Eight per cent interest	1,182,755.37	429,726.39	1,612,481.76

D. Recapitulation—Total Business, State of Arkansas.

	Freight.	Passenger.	Total.
Gross Revenue	\$4,896,272.91	\$1,778,803.88	\$6,675,076.79
Operating Expenses	3,253,034.86	1,678,189.89	4,931,224.75
Net Operating Revenue	\$1,643,238.05	\$100,613.99	\$1,743,852.04
Less, Taxes and Rentals	179,030.25	65,046.44	244,076.69
Balance	\$1,464,207.80	\$35,567.55	\$1,499,775.35
Return on the assessed value of the property after deducting Taxes and Rentals	9.90%	0.66%	7.44%

5242

EXHIBIT No. —.

E. The Intra-State gross freight and passenger revenue, as shown in Statement No. 1, is:

	Freight.	Passenger.	Total.
Gross Revenue	\$640,248.17	\$836,542.20	\$1,476,790.37
The intra-state proportion of the total operating expenses, divided on per cents based upon the gross revenue of each class of traffic (Freight 13.08%, Passenger 47.03%), is,			
Operating Expenses	\$425,496.96	\$789,252.70	\$1,214,749.66
Leaving.....	\$214,751.21	\$47,289.50	\$262,040.71

From these amounts there should be deducted a proportion of the taxes and rentals; divided on a revenue basis, (per cents shown above) the charge is as follows:

Taxes and Rentals.....	\$23,417.16	\$30,591.34	\$54,008.50
Leaving.....	\$191,334.05	\$16,698.16	\$208,032.21

F. From the sums thus left there should be deducted such sums as the Court may find to represent the extra cost of handling Intra-State traffic. This extra cost is shown under various percentages in statements No. 6 and 7, and the result of applying any of the percentages is as follows:

	Freight.	Passenger.
Amount left after deducting Taxes and Rentals.....	\$191,334.05	\$16,698.16
Extra Cost @ 50%.....	173,386.76	58,568.83
Surplus	\$17,947.29	\$41,870.67
Extra cost @ 100%.....	\$326,930.00	\$93,475.18
Deficit	\$135,595.95	\$76,777.02
Extra cost @ 150%.....	\$463,882.77	\$125,696.42
Deficit	\$272,548.72	\$108,998.26
Extra cost @ 200%.....	\$586,196.88	\$169,161.54
Deficit	\$394,862.83	\$152,463.38

G. Assuming that the property of the Company is worth at least the amount of the State's valuation for purposes of taxation, the value of the property to be assigned to each class of Intrastate traffic, is as follows:

Freight	13.08% of \$14,784,442.14 or	\$1,933,805.03
Passenger	47.03% of 5,371,579.86 or	2,526,254.01

Total..... \$20,156,022.00 \$4,460,059.04

Making no allowance for the extra cost of handling Intrastate traffic, the per cent of return on the values shown above would be:

Freight 9.89% Passenger..... 0.66% Total..... 4.66%

Allowing 50% for the extra cost of handling Intrastate freight and nothing for passengers, the per cent of return upon the values shown above, would be:

Freight 0.93% Passenger..... 0.66% Total..... 0.78%

St. Louis, Iron Mountain & Southern Railway Company, State of Arkansas.

Statement of Gross Revenue for Six Months Ending December 31st, 1907.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RY. CO.

2297

	Freight.			Passenger.			Grand total.
	Interstate.	State.	Miscellaneous.	Interstate.	State.	Miscellaneous.	
1. Freight Revenue	\$4,133,210.33	\$640,248.17	.....	.....	.....	.....	\$4,773,458.50
2. Passenger Revenue	\$836,542.20	.....	1,405,018.41
5. Mail Revenue	\$202,637.71	202,637.71
6. Express Revenue	133,910.82	133,910.82
3. Excess Baggage Revenue.....	14,507.65	14,507.65
4. Parlor & Chair Car Revenue.....	1,054.32	1,054.32
7. Milk Revenue	15.26	15.26
8. Other Passgr. Train Revenue...	481.09	481.09
9. Switching Revenue	\$27,344.87	.....	.....	.....	27,344.85
10. Special Service Train Revenue...	141.46	141.46
11. Misc'l. Transp't'n Revenue	Dr. 428.16	.....	.....	Dr. 554.18	Dr. 554.18
12. Station & Train Privileges	3,474.54	.....	.....	1,022.66	4,497.20
13. Parcel Room Receipts.....
14. Storage—Freight	4,541.27	.....	.....	.....	4,541.27
15. Storage—Baggage	359.59	359.59
16. Car Service	20,675.48	.....	.....	.....	20,675.48
17. Telegraph Service
18. Rents of Buildings & Other Prop-erty.....	55,578.87	.....	.....	16,358.58	71,937.45
19. Miscellaneous	11,627.56	.....	.....	3,422.35	15,049.91
Grand Total.....	\$4,133,210.33	\$640,248.17	\$122,814.41	\$568,476.21	\$836,542.20	\$373,785.47	\$6,673,076.79

St. Louis, Iron Mountain & Southern Railway Company, State of Arkansas.

Formulae Used in Dividing Gross Revenue Between Freight and Passenger and Between Intrastate and Interstate.

No. 1. Freight Revenue:

No. 2. *Passenger Revenue*: The revenue from freight and passenger moving wholly within the State is credited to the State under *Intra-State revenue*. The revenue from freight moving partly in another State or States, is divided between the States through which the shipment moved upon a stright pro-rata per mile basis. The same rule applies to the division of revenue from Passengers traveling partly in Arkansas and partly in other States where the maximum rate is two cents per mile. When the maximum passenger rate in any State is more than two cents per mile, that State is allowed constructive mileage on interstate business, making the division of revenue on a pro-rata per rate basis.

All revenue accruing to Arkansas from business moving partly in Arkansas and partly in other States is credited to the State under *Interstate revenue*.

No. 3. *Excess Baggage Revenue*: The revenue from excess baggage is credited to the various States upon the basis of the actual mileage over which the baggage moves.

No. 4. *Parlor & Chair Car Revenue*: The revenue from Parlor and Chair Cars is credited to the various States upon the basis of the actual mileage of each train in each State.

No. 5. *Mail Revenue*: The transportation of mail is done under contract with the United States Government and the territory is divided into various "Mail Routes" for which compensation is allowed at certain rates per pound-mile handled. In cases where the entire mail route is located entirely in one State, all of the revenue is credited to that State.

When the mail route is through two or more States, the revenue is divided between States upon the basis of the actual mileage in each State.

No. 6. *Express Revenue*: The revenue from the handling of express is reported to us by the Express Company in total, the railroad company having no record of the details of business handled. The amount received from the Express Company is divided between States upon the basis of the gross freight earnings in each State.

No. 7. *Milk Revenue (on Passenger Trains)*: Basis similar to Account No. 4.

No. 8. *Other Passenger Train Revenue*: Basis similar to Account No. 4.

No. 9. *Switching Revenue*: The revenue earned from switching service is credited to the State in which the service is performed.

No. 10. *Special Service Train Revenue*: Basis similar to Account No. 4.

5245

No. 11. *Miscellaneous Transportation Revenue*: The revenue credited to this account is credited to the States in which the service is performed.

No. 12. *Station and Train Privileges*: Revenue from station privileges is credited to the State in which the station is located. Earnings from Train Privileges are divided between States upon the basis of the mileage of lines covered by the contracts. These earnings are derived from contracts made with News Companies for the privileges of selling papers, fruit, etc., at stations and on trains.

No. 13. *Parcel Room Receipts*: Revenue from parcel-room receipts is credited to the State in which the Station is located.

No. 14. *Storage—Freight*: Revenue from the storage of freight is credited to the State in which the service is performed.

No. 15. *Storage—Baggage*: Basis similar to Account No. 14.

No. 16. *Car Service*: Basis similar to Account No. 14.

No. 17. *Telegraph Service*: This Company has no revenue credited to this account.

No. 18. *Rents of Buildings and Other Property*: The revenue from rent of buildings and other property is credited to the State in which the property is located.

No. 19. *Miscellaneous*: The revenue credited to this account is as a rule derived from services of a local nature and credited to the State in which the service is performed.

NOTE.—Revenue Accounts No. 3, 4, 5, 6, 7, 8, 10, 13, and 15 are credited to the passenger service; accounts No. 9, 14, and 16 are credited to the freight service and accounts No. 11, 12, 18, and 19 are divided between the passenger and freight service upon the basis of the actual freight and passenger earnings; Freight 77.26%, Passenger 22.74%.

No attempt has been made to divide miscellaneous revenue between State and Interstate for the reason that rates on this class of business are not an issue in this litigation and for the further reason that in the case of Mail and Express revenue, which is 19% of all passenger revenue, there is no reasonable basis by which such an apportionment can be made.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Gross Revenue for Six Months Ending December 31st, 1907.

Character.	Whole line.	State of Arkansas.	Percentage of total credited to Arkansas.
1. Freight Revenue	\$8,925,034.34	\$4,773,458.50	53
2. Passenger Revenue	2,393,913.82	1,405,018.41	59
3. Excess Baggage Revenue	23,993.66	14,507.65	60
4. Parlor & Chair Car Revenue	1,413.25	1,054.32	75
5. Mail Revenue	329,324.34	202,637.71	62
6. Express Revenue	257,734.75	133,910.82	52
7. Milk Revenue (on Passenger Trains)	6,532.72	15.26	..
8. Other Passgr. Train Revenue	838.28	481.09	57
9. Switching Revenue	219,492.13	27,344.85	12
10. Special Service Train Revenue	1,060.20	141.46	13
11. Misc'l. Transp't'n Revenue	1,009.46	Dr. 554.18	..
12. Station & Train Privileges	8,580.80	4,497.20	52
13. Parcel Room Receipts .....	..	..	..
14. Storage—Freight	6,950.85	4,541.27	65
15. Storage—Baggage	436.47	359.59	82
16. Car Service	42,622.80	20,675.48	49
17. Telegraph Service .....	..	..	..
18. Rents of Buildings & Other Property	141,052.01	71,937.45	51
19. Miscellaneous	25,957.53	15,049.91	58
Total	\$12,385,947.41	\$6,675,076.79	54

Statement of Various Mileage Statistics for Six Months Ending December 31st, 1907.

Track Mileage	2,599.15	1,353.02	52
Revenue Freight Train Mileage.....	3,078,251	1,561,258	51
Revenue Passenger Train Mileage.....	2,470,022	1,461,474	59
Mixed Train Mileage.....	107,583	59,140	55
Total Train Mileage.....	5,655,856	3,081,872	54
Loaded Freight Car Mileage.....	65,958,062	36,439,562	55
Empty Freight Car Mileage.....	20,980,138	10,076,090	48
Passenger Car Mileage.....	13,033,063	7,686,781	59
Total Engine Mileage.....	7,625,796	4,052,786	53
No. of Tons Hauled.....	5,395,603	3,423,253	63
No. of Tons Hauled one mile.....	1,228,717,919	660,163,995	54
No. of Passengers carried.....	2,819,020	1,702,490	60
No. of Passengers carried one mile.....	120,919,916	73,842,620	61

The St. Louis, Iron Mountain & Southern Railway Company.

Statement of Operating Expenses, Six Months Ending December 31st, 1907.

Company classification of Accounts, Maintenance of way & structures.	Total.	Amounts chargeable to Arkansas.	Percentage of total expense chargeable to Arkansas.
1. Track Maintenance	\$445,966.14	\$249,022.63	56%
2. Applying Track Material	260,265.55	141,309.32	54
3. Roadway Policing	83,368.41	43,421.31	52
4. Flood Damages	13,749.28	11,148.08	81
5. General Cleaning	57,636.78	30,578.90	53
6. Ballast	31,913.18	22,434.42	70
7. Rails	85,535.21	16,784.63	20
8. Ties	333,252.05	210,209.70	63
9. Track Appliances	68,820.08	30,960.34	45
10. Roadway Tools	25,481.45	11,761.89	46
11. Other Roadway Maintenance	12,709.50	5,408.95	43
12. Bridges and Culverts	127,689.31	70,803.45	55
13. Buildings and Grounds	71,267.53	38,435.57	54
16. Docks and Wharves	8,969.65	.....	..
17. Interlocking Plants & Signals	11,130.88	3,237.45	29
18. Fences, Road Crossings & Signs	24,219.60	13,649.17	56
19. Telegraph and Telephone Lines	12,774.44	7,836.29	61
20. Engineering & Superintendence	107,117.16	55,008.84	51
21. Personal Injuries	3,961.03	2,486.85	63
23. Stationery and Printing	3,740.06	1,884.54	50

Equipment Borrowed—Dr.	333,690.71	178,871.81	54
Equipment Loaned—Cr.	250,673.22	133,223.98	53
Work Car—Renewals	731.59	403.20	55
Work Equipment—Depreciation	536.46	293.90	55
Total Maintenance of Equipment.....	\$1,892,321.66	\$1,035,566.07	55
51. Station Service—Passenger.....	\$19,847.59	\$16,240.67	82%
52. Station Service—Freight	243,993.57	105,372.65	43
53. Station Service—Combined	118,844.12	67,686.34	57
54. Station Supplies	21,253.76	11,980.48	56
55. Stock Yards and Elevators—Operation of	Cr. 4.13	205.92	..
56. Yard Supervision	68,500.54	32,306.16	47
57. Yardmen	234,104.88	119,710.41	51
58. Yard Enginemen and Firemen	128,700.19	60,818.78	47
59. Yard Locomotives—Fuel for	89,912.33	36,817.84	41
60. Road Enginemen & Firemen Passgr.	172,290.49	100,064.38	58
61. Trainmen—Passenger	141,787.58	82,707.76	58
62. Road Locomotives—Fuel for—Passgr.	164,739.70	96,802.10	59
63. Passenger Cars—Care of	85,620.54	50,600.32	59
64. Other Train Supplies—Passenger	7,799.57	4,594.09	59
65. Road Enginemen & Firemen—Freight	369,150.64	195,706.64	53
66. Trainmen—Freight	500,594.06	271,918.53	54
67. Road Locos.—Fuel for—Freight	353,188.23	168,359.39	48
68. Freight Cars—Lubrication of	14,892.49	7,962.60	53
69. Other Train Supplies—Freight	36,801.89	19,595.68	53
70. Enginehousemen	252,115.20	133,165.31	53
71. Fuel Stations—Operation of	90,105.39	45,526.25	51
72. Locomotives—Water Supply for	52,749.64	27,227.07	52

5248

Statement of Operating Expenses.

Company classification of accounts conducting Transportation—Operation:		Percentage of total expense chargeable to Arkansas.
24. Incidentals	Total. 673.24	80
25. Maint. Jt. Trks., Bldgs., Yds. & Termsl.	2,076.02	..
Total Maint. of Way & Struct.	\$1,792,316.55	54
Maintenance of equipment:		
31. Locomotives—Repairs of	\$650,536.16	53
32. Passenger Cars—Repairs of	132,100.40	59
35. Freight Cars—Repairs of	748,317.08	53
36. Work Cars—Repairs of	39,261.35	57
37. Floating Equipment—Repairs of	4,730.58	..
38. Superintendence	67,402.53	55
39. Personal Injuries	3,696.26	53
40. Tools & Machinery—Repairs of	63,288.35	77
42. Shops—Heating and Lighting.	5,069.38	56
43. Watchmen	3,647.75	57
44. Stationery and Printing.	2,742.47	51
45. Incidentals	5,779.23	73
46. Equip. used in Jt., Yds. and Termsl.—Repairs of ..	Cr. 3,625.11	..
Locomotives—Depreciation	18,175.32	53
Passenger Cars—Depreciation	9,751.03	59
Freight Cars—Renewals	27,046.75	54
Freight Cars—Depreciation	32,302.11	54
Floating Equipment—Depreciation	Cr. 2,185.52	..
Amounts chargeable to Arkansas.		
538.28	538.28	
Cr. 1,474.72	Cr. 1,474.72	
\$965,445.89	\$965,445.89	
Amounts chargeable to Arkansas.		
\$344,985.58	\$344,985.58	
77,775.19	77,775.19	
398,992.36	398,992.36	
22,533.82	22,533.82	
..	..	
36,932.29	36,932.29	
1,941.22	1,941.22	
48,671.67	48,671.67	
2,839.57	2,839.57	
2,085.69	2,085.69	
1,392.45	1,392.45	
4,205.75	4,205.75	
Cr. 500.48	Cr. 500.48	
9,660.69	9,660.69	
5,752.03	5,752.03	
14,663.04	14,663.04	
17,290.27	17,290.27	
..	..	

Equipment Borrowed—Dr.	333,690.71	178,871.81	54
Equipment Loaned—Cr.	250,673.22	133,223.98	53
Work Car—Renewals	731.59	403.20	55
Work Equipment—Depreciation	536.46	293.90	55
Total Maintenance of Equipment.....	\$1,892,321.66	\$1,035,566.07	55
51. Station Service—Passenger.....	\$19,847.59	\$16,240.67	82%
52. Station Service—Freight	243,993.57	105,372.65	43
53. Station Service—Combined	118,844.12	67,686.34	57
54. Station Supplies	21,253.76	11,980.48	56
55. Stock Yards and Elevators—Operation of	Cr. 4.13	205.92	..
56. Yard Supervision	68,500.54	32,306.16	47
57. Yardmen	234,104.88	119,710.41	51
58. Yard Enginemen and Firemen	128,700.19	60,818.78	47
59. Yard Locomotives—Fuel for	89,912.33	36,817.84	41
60. Road Enginemen & Firemen Passgr	172,290.49	100,064.38	58
61. Trainmen—Passenger	141,787.58	82,707.76	58
62. Road Locomotives—Fuel for—Passgr	164,739.70	96,802.10	59
63. Passenger Cars—Care of	85,620.54	50,600.32	59
64. Other Train Supplies—Passenger	7,799.57	4,594.09	59
65. Road Enginemen & Firemen—Freight	369,150.64	195,706.64	53
66. Trainmen—Freight	500,594.06	271,918.53	54
67. Road Locos.—Fuel for—Freight	353,188.23	168,359.39	48
68. Freight Cars—Lubrication of	14,892.49	7,962.60	53
69. Other Train Supplies—Freight	36,801.89	19,595.68	53
70. Enginehousemen	252,115.20	133,165.31	53
71. Fuel Stations—Operation of	90,105.39	45,526.25	51
72. Locomotives—Water Supply for	52,749.64	27,227.07	52

Statement of Operating Expenses.

Company classification of accounts conducting transportation—traffic.	Total.	Amounts chargeable to Arkansas.	Percentage of total expenses chargeable to Arkansas.
73. Locos.—Oil, Grease, Waste, etc., for.....	23,088.46	15,289.23	66
74. Locomotives—Other Supplies for.....	28,339.44	15,788.71	56
75. Signalmen	30,610.91	13,126.65	43
76. Highway Crossing Watchmen.....	9,505.64	4,737.09	50
77. Policemen	13,105.78	5,867.77	45
78. Signal Supplies	4,080.18	1,336.15	33
79. Highway Crossing Supplies.....	99.91	45.33	45
80. Wrecks—Clearing	76,610.76	39,062.21	51
81. Injuries to Persons.....	134,370.95	84,737.14	63
82. Stock Killed & Damage to Property.....	111,815.93	69,515.44	62
83. Loss & Damage to Baggage and Personal Property..	3,192.00	2,586.00	81
84. Loss & Damage to Freight in Transit.....	140,123.79	81,360.60	58
89. Rents of Bldgs. & Other Property.....	1,201.54	423.95	35
90. Superintendence—Transportation	124,688.87	68,682.46	55
91. Telegraph & Telephone—Operation of.....	170,009.00	86,812.03	51
92. Floating Equipment—Operation of.....	23,271.07	.....	..
93. Elevation & Longshore Labor.....	2,742.36	.....	..
104. Stationery & Printing—Transp'n.....	28,631.32	14,164.53	49
105. Incidentals	6,197.81	3,608.04	58
106. Operation Jt. Trks., Bdgs., Yds. and Terms.....	10,093.26	Cr. 713.20	..
107. Flood Damages	3,210.20	2,962.60	92
Total Condt. Transp'n.—Operation.....	\$4,111,977.45	\$2,164,762.10	53

5249

110. Superintendence—Passenger	\$19,309.59	\$10,445.55	54%
111. Foreign Agencies—Passenger	39,436.93	22,461.66	57
112. Advertising—Passenger	24,364.91	13,369.89	55
113. Stationery & Printing—Passenger	12,782.09	6,998.98	55
114. Superintendence—Freight	32,752.46	16,967.68	52
115. Foreign Agencies—Freight	104,399.57	54,128.20	52
117. Stationery & Printing—Freight	33,466.59	17,638.54	53
Total Condt. Transp'n.—Traffic	\$266,512.14	\$142,010.50	53

General expenses:

121. General Officers	\$64,790.98	\$33,895.99	52
122. Clerks	234,817.02	125,856.46	54
123. Attendants	11,956.42	6,194.22	52
124. Heat and Light	2,950.35	1,540.06	52
125. Office Expenses and Supplies	77,595.00	42,588.59	55
126. Insurance	35,964.20	19,199.67	53
127. Law Expenses	68,332.22	43,814.06	64
128. Stationery & Printing	18,986.44	9,976.33	53
129. Incidentals	17,213.27	9,335.70	54
Gen'l Admr. Jt. Trks., Yds. and Terms	23.08	584.35	..
Total General Expenses	\$532,628.98	\$292,985.43	55
Total Operating Expense	\$8,595,756.78	\$4,600,769.99	54

Maint. Fund—Balance:				
Rails	Cr. \$9,257.57	5,437.72	..	
Ties	224,780.89	83,792.90	..	
			—	
Total.....	\$215,523.32	\$89,230.62	..	
Casualty credit fund—balance:				
Injuries to Persons	Cr. \$3,446.65	\$5,733.75	..	
Stock Killed & Damage to Property.....	12,797.74	10,932.93	..	
Loss & Damage to Baggage.....	Cr. 1,102.13	Cr. 932.69	..	
Loss & Damage to Freight.....	44,429.99	46,148.78	..	
			—	
Total.....	\$52,678.95	\$61,882.77	..	
Hire of equipment:				
Freight Cars	\$352,572.65	\$188,686.18	54	
Passenger Cars	12,900.36	7,584.40	59	
Locomotives & Other Equipment.....	Cr. 35,561.04	Cr. 18,113.11	51	
			—	
Total.....	\$329,911.97	\$178,157.47	54	
Dining Car—Balance	\$1,865.33	\$1,183.90	63	
Taxes	\$317,931.70	\$222,148.18	70	
Rentals	\$3,044.78	\$21,928.51	..	

Percentage of Operating Expenses when Adjusted.

	Total.	Arkansas.	Per cent.
7. Rails	\$76,277.64	\$22,222.35	29%
8. Ties	558,032.94	294,002.60	53
Total Maint. of Way & Struct.....	\$2,007,839.87	\$1,054,676.51	53
81. Injuries to Persons.....	\$130,924.30	\$90,470.89	69
82. Stock Killed, etc.....	124,613.67	80,448.37	65
83. Loss & Damage to Baggage.....	2,089.87	1,653.31	79
84. Loss & Damage to Freight.....	184,553.78	127,509.38	69
Hire of Equipment.....	329,911.97	178,157.47	54
Dining Cars—Balance	1,868.33	1,183.90	63
Total Condt. Transp'n.—Operation.....	\$4,496,436.70	\$2,405,986.24	54
Total Operating Expenses.....	\$9,195,739.35	\$4,931,224.75	54
<i>Recapitulation.</i>			
Total Operating Expenses.....	\$9,195,739.35	\$4,931,224.75	54
Taxes	317,931.70	222,148.18	70
Rentals	3,044.78	21,928.51	720
Total.....	\$9,516,715.83	\$5,175,301.44	54

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Bases Used in Dividing Operating Expenses, Taxes and Other Fixed Charges Between States and Between the Freight and Passenger Business.

Maintenance of Way & Structures: This account includes all cost of repairs to and maintenance of roadway and track, bridges, trestles, culverts, fences, etc., also material and supplies used in repairing same, and supervision. This expense is practically all localized and is charged to the State in which the expense is incurred. The total charge to Maintenance of Way & Structures is divided between freight and passenger upon the basis of the number of train miles in each class of service.

Maintenance of Equipment: This account includes all cost of repairs, renewals and depreciation of cars and locomotives also shop machinery and tools. The cost of repairs, renewals and depreciation of equipment being of a general nature and not applicable to any particular State is divided between all States upon the basis of the mileage of each class of service in each state. The cost of repairs to shop machinery and tools, stationery and printing and supervision is divided between States upon the basis of the total engine mileage over the territory under the jurisdiction of each shop superintendent. The cost of repairs to freight and passenger cars are compiled separately and all expense of a common nature is divided between freight and passenger upon the basis of the number of train miles in each class of service.

Traffic Expenses: Traffic expenses include salaries and expense of officers and employes directly in charge of traffic; General Commercial, district and other agents engaged exclusively in soliciting traffic; Advertising; Immigration Bureau, etc. Salaries and expenses of General Officers and Agents and all traffic expenses of a general nature are divided between States upon the basis of the gross earnings in each State. The expense of officers and employes having charge of both freight and passenger business, is divided between the freight and passenger service in proportion to the amount of work done for each.

Station Service: Station Service includes, the wages of Station Employés, Station Supplies and Expenses and Telegraph and Telephone expense. This expense is practically all local and is charged to the State in which the expense is incurred. Wages of employés at and expenses of stations handling both freight and passenger business are divided 75% freight and 25% passenger which is approximately the proportion of revenue of each class of business.

Yard Service: Yard Service includes the wages of all yardmen, yard enginemen and oil and fuel for yard locomotives and like the station service is localized. The total charge to yard service is divided 95% freight and 5% passenger. This is the proportion of yard engine mileage in each class of service.

Train Service: Train Service includes the wages of Trainmen and Oil and Other Train Supplies. The wages of trainmen are divided between States upon the actual mileage of each run in each State. The cost of supplies is divided between States upon the basis of the car mileage in each State. The cost of each class of service is ascertained and compiled separately, the mixed train expense being divided 75% freight and 25% passenger.

5252

Engine Service: Engine Service includes the wages of enginemen, fuel, water and other supplies furnished locomotives and enginehouse expense. The wages of engine crews are divided between States upon the actual mileage of each run in each State. Enginehouse expense is charged to the State in which the enginehouse is located. The cost of each class of engine service is ascertained and compiled separately, the mixed train expense being divided 75% freight and 25% passenger. Water and other supplies and enginehouse expense is divided between freight and passenger upon the basis of the number of train miles in each class of service.

Other Transportation Expense: Other expenses include Superintendence, Miscellaneous Labor and Supplies, Wrecks, and Casualties. Salaries and expenses of division officers are divided between States upon the basis of the mileage of line under their supervision in each State. Miscellaneous labor and supplies which cannot be localized are divided between States upon the basis of the mileage of the lines benefited. Wrecks and casualties are charged to the State in which the loss occurs. Items included in Other Expenses which are of a common nature are divided between freight and passenger upon the basis of the number of train miles in each class of service.

General Expenses: General Expenses include the salaries and expenses of General Officers, their clerks and attendants, general office supplies and expenses, Law expenses, etc. This expense is divided between States upon the basis of the gross earnings in each State and between freight and passenger upon the basis of the number of train miles in each class of service.

Hire of Equipment: This account includes the amount of Rentals, Mileage or Per Diem paid for the use of equipment belonging to other companies, less the amount received from other companies for the use of our equipment. This item is divided between States upon the basis of the total mileage of each class of equipment in each State. The net rental paid for passenger equipment is charged to the passenger service. The net rental paid for freight equipment is charged to the freight service, and the net rental paid for hire of locomotives is divided between freight and passenger upon the basis of the number of train miles in each class of service.

Taxes: The total amount of taxes paid in each State is divided between freight and passenger upon the basis of the gross earnings of each class of service.

Rentals: This account represents the net amount paid for the use of main tracks, side tracks and spurs belonging to other companies. It is charged or credited to the State in which the track is located and divided between the freight and passenger upon the basis of the gross earnings of each class of service.

5253

STATEMENT No. 6.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Extra Cost of State Freight Business, Revenue Basis.

(A) At 50%.

State	13.08% x 1½ =	19.62 =	18.41,	Difference	5.33+
Interstate	84.41	84.41 =	79.23,	Difference	5.18—
Miscellaneous	2.51	2.51 =	2.36,	Difference	.15—
Total	100.00	106.54	100.00		

The extra cost is 5.33% of \$3,253,034.86 or \$173,386.76.

(B) At 100%.

State	13.08% x 2 =	26.16 =	23.13,	Difference	10.05+
Interstate	84.41	84.41 =	74.85,	Difference	9.76—
Miscellaneous	2.51	2.51 =	2.22,	Difference	.29—
Total	100.00	113.08	100.00		

The extra cost is 10.05% of \$3,253,034.86 or \$326,930.00.

(C) At 150%.

State	13.08% x 2½ =	32.70 =	27.34, Difference	14.26+
Interstate	84.41	84.41 =	70.56, Difference	13.85—
Miscellaneous	2.51	2.51 =	2.10, Difference	.41—
Total.....	<u>100.00</u>	<u>119.62</u>	<u>100.00</u>	

The extra cost is 14.26% of \$3,253,034.86 or \$463,882.77.

(D) At 200%.

State	13.08% x 3 =	39.24 =	31.10, Difference	18.02+
Interstate	84.41	84.41 =	66.91, Difference	17.50—
Miscellaneous	2.51	2.51 =	1.99, Difference	.52—
Total.....	<u>100.00</u>	<u>126.16</u>	<u>100.00</u>	

The extra cost is 18.02% of \$3,253,034.86 or \$586,196.88.

STATEMENT NO. 7.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Extra Cost of State Passenger Business, Revenue Basis.

(A) At 15%.

State	47.03% x 1.15 =	54.08 =	50.02,	Difference	3.49+
Interstate	31.96	31.96 =	29.85,	Difference	2.11—
Miscellaneous	21.01	21.01 =	19.63,	Difference	1.38—
Total.....	100.00	107.05	100.00		

The extra cost is 3.49% of \$1,678,189.89 or \$58,568.83.

(B) At 25%.

State	47.03% x 1.25 =	58.79 =	52.60,	Difference	5.57+
Interstate	31.96	31.96 =	28.60,	Difference	3.36—
Miscellaneous	21.01	21.01 =	18.80,	Difference	2.21—
Total.....	100.00	111.76	100.00		

The extra cost is 5.57% of \$1,678,189.89 or \$93,475.18.

(C) At 35%.

State	47.03% x 1.35 =	63.49 =	54.52, Difference	7.49+
Interstate	31.96	31.96 =	27.44, Difference	4.52—
Miscellaneous	21.01	21.01 =	18.04, Difference	2.97—
Total	100.00	116.46	100.00	

The extra cost is 7.49% of \$1,678,189.89 or \$125,696.42.

(D) At 50%.

State	47.03% x 1½ =	70.54 =	57.11, Difference	10.08+
Interstate	31.96	31.96 =	25.88, Difference	6.08—
Miscellaneous	21.01	21.01 =	17.01, Difference	4.00—
Total	100.00	123.51	100.00	

The extra cost is 10.08% of \$1,678,189.89 or \$169,161.54.

5255 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending December 31st, 1907, and Interest at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment of 1909.
Proportion assignable to Freight Traffic for six months ending December 31st, 1907 (73.35%)	\$14,665,072.35	\$15,002,485.28	\$17,657,415.67
Six per cent on above	879,904.34	900,149.12	1,059,444.94
Seven per cent	1,026,555.06	1,050,173.97	1,236,019.10
Eight per cent	1,173,205.79	1,200,198.82	1,412,593.25
Proportion assignable to Passenger Traffic for six months ending December 31st, 1907 (26.65% of)	\$5,328,209.65	\$5,450,800.72	\$6,415,407.33
Six per cent on above	319,692.58	327,048.04	384,924.44
Seven per cent	372,974.68	381,556.05	449,078.51
Eight per cent	426,256.77	436,064.06	513,232.59
Proportion assignable to Total Traffic for six months end- ing December 31st, 1907	\$19,993,282.00	\$20,453,286.00	\$24,072,823.00
Six per cent on above	1,199,596.92	1,227,197.16	1,444,369.38
Seven per cent	1,399,529.74	1,431,730.02	1,685,097.61
Eight per cent	1,599,462.56	1,636,262.88	1,925,825.84

Per cent of return on the assessed value of the Property as shown by the net earnings on all traffic for six months ending December 31st, 1907 (Exhibit 3, Par. D):

Freight	9.98%	9.76%	8.29%
Passenger .....	.67%	.65%	.55%
Total	<u>7.50%</u>	<u>7.33%</u>	<u>6.23%</u>
Proportion assignable to Intrastate Freight Traffic for six months ending December 31st, 1907 (13.08%)	\$1,918,191.46	\$1,962,325.07	\$2,309,589.97

5258

Page 2.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending December 31st, 1907, and Interest at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment of 1909.
Per cent of return on the assessed value, as shown by the net earnings from Intrastate freight traffic for six months ending December 31st, 1907 (Exhibit No. 3, Par. E. & F.):			
No extra cost.....	9.97%	9.75%	8.28%
50% extra cost.....	.94%	.91%	.78%
Proportion assignable to Intrastate Passenger Traffic for six months ending December 31st, 1907 (47.03%)	\$2,505,857.00	\$2,563,511.58	\$3,017,166.07

Per cent of return on the assessed value, as shown by the net earnings from Intrastate passenger traffic for six months ending December 31st, 1907 (Exhibit 3, Par. E):

No. Extra cost.....	0.67%	0.65%	0.55%
Proportion assignable to all Intrastate traffic as shown above	\$4,424,048.46	\$4,525,836.65	\$5,326,756.04
Per cent of return upon the assessed value, as shown by the net earnings from all Intrastate traffic (Exhibit 3, Par. E. & F.):			
No Extra cost.....	4.70%	4.60%	3.91%
50% extra cost for freight only.....	0.78%	0.77%	0.65%

NOTE.—This is a revision of Exhibit No. 3, paragraph-C, D, and G, based on additional Assessments. The value of the property used in this statement is double the assessment as shown in Exhibit 7a.

5259 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5260

EXHIBIT FOUR.

5261

EXHIBIT No. 4.

Another basis for ascertaining the cost of handling Intrastate business, and for determining whether the same is profitable or not was laid down by Judge Willis Van Danner of the United States Circuit Court, and upon the results shown by the adoption of that basis, a temporary injunction was granted. In granting the restraining order, Judge Van Danner said:

"Here the additional cost is shown to be at least 100% in freight traffic and at least 15% in passenger traffic, and this is not more than what has been shown in other cases. Undoubtedly these differences furnish a standard by which to apportion the total cost between the traffic which is intrastate and that which is interstate. Other standards are suggested, but the proofs indicate that none of them is as satisfactory or accurate as is the difference in cost in its relation to the revenue."

This basis is shown in detail in Statement No. 1 and the result of applying this basis to the figures of the St. Louis, Iron Mountain & Southern Railway Company is as follows:

	Freight.	Passenger.
Intrastate Revenue	\$640,248.17	\$836,542.20
Operating Expenses	791,310.15	865,571.12
Deficit.....	\$151,061.98	\$29,028.92
Return at six per cent upon the assessed value of the property.....	\$184,911.34	\$202,326.15
Deficit.....	\$335,973.32	\$231,355.07

At an extra cost on Intrastate traffic of 50% instead of 100% as shown in paragraph F of Statement attached, the result is:

5262

STATEMENT No. 1.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Basis for Ascertaining the Cost of State Business, Adopted by Judge Willis Van Devanter in the Arkansas R. Rates Case, 163 Fed. Rep., 142.

After setting aside a proportion of the total operating expense to cover the cost of miscellaneous business, (this proportion based upon the percentage of miscellaneous earnings to the total earnings) "Increase the intrastate earnings by the ascertained percentage representing the difference in cost, thereby ascertaining what would have been earned by the same actual expenditure in conducting the intrastate traffic, had it been attended with the same relative cost as the interstate traffic. Then add the intrastate earnings, as so increased, to the interstate earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intrastate and the interstate traffic, had the former been attended with the same relative cost as the latter. Then ascertain what proportion of this total represents the intrastate earnings, as so increased, and what proportion

	Freight.	Passenger.
Intrastate Revenue	\$640,248.17	\$836,542.20
Operating Expenses	630,705.97	865,571.12
Surplus.....	\$9,542.20	
Deficit.....		\$29,028.92
Return at rate of 6% on the Assessed valuation	\$147,421.14	\$202,326.15
Deficit.....	\$137,878.94	\$231,355.07

represents the interstate earnings, and then ascertain the corresponding proportion of the total cost of the intrastate and the interstate traffic."

The assessed valuation of the Company's property should be multiplied by two, and the amount thus ascertained should be divided between the various classes of business on the basis of the cost to operate each class of business.

Applying this basis to the revenue and expenses for the State of Arkansas, there is this result:

(A) Revenue.

	Freight.		Passenger.	
	Amount.	Per cent.	Amount.	Per cent.
Intrastate	\$640,248.17	13.08	\$836,542.20	47.03
Interstate	4,133,210.33	84.41	568,476.21	31.96
Miscellaneous	122,814.41	2.51	373,785.47	21.01
Total	\$4,896,272.91	100.00	\$1,778,803.88	100.00

(B) Expenses including

Taxes and Rentals	\$3,432,065.11	\$1,743,236.33
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Expenses of Miscellaneous Traffic:

Freight	86,144.83	366,253.96
Passenger	2.51%	
Balance	21.01%	\$1,376,982.37

5263

PAGE 2.—STATMENT No. 1.

147—813

(C) Intrastate Revenue.....		Freight.	Per cent.	Passenger.	Per cent.
		\$640,248.17	.....	\$836,542.20	.....
Increase representing extra cost:					
Freight	100%	640,248.17	.....	.....	.....
Passenger	15%	.....	.....	125,481.33	.....
Total.....		\$1,280,496.34	23.65	\$962,023.53	62.86
Interstate Revenue		4,133,210.33	76.35	568,476.21	37.14
Grand Total		\$5,413,706.67	100.00	\$1,530,499.74	100.00

(D) The total expense shown in paragraph B, divided on percentages shown above are as follows:

Freight.	Amount.	Per cent.
Intrastate	\$791,310.15	15.29
Interstate	2,554,610.13	49.36
Total.....	\$3,345,920.28	
Miscellaneous	86,144.83	1.66
Total Freight	\$3,432,065.11	66.31

Passenger.

Intrastate	\$865,571.12	16.73
Interstate	511,411.25	9.88
Total.....	<u>\$1,376,982.37</u>	
Miscellaneous	366,253.96	7.08
Total Passenger	<u>\$1,743,236.33</u>	<u>33.69</u>
Grand Total	<u>\$5,175,301.44</u>	<u>100.00</u>

(E) The assessment of the State Board of Equalization is \$20,156,022.00; twice this amount is \$40,312,044.00 and 6% on this amount for six months is \$1,209,361.32. Dividing these amounts between each class of traffic on per cents shown above, the result is as follows:

	Assessed valuation for six months.	Assessed valuation for six months.	Six per cent on valuation for six months.
Freight.			
Intrastate	\$6,163,711.53	\$3,081,855.77	\$184,911.34
Interstate	19,898,024.92	9,949,012.46	596,940.75
Miscellaneous	669,179.93	334,589.96	20,075.40
Passenger.			
Intrastate	6,744,204.96	3,372,102.48	202,326.15
Interstate	3,982,829.95	1,991,414.97	119,484.90
Miscellaneous	2,854,092.71	1,427,046.36	85,622.78
Grand Total	<u>\$40,312,044.00</u>	<u>\$20,156,022.00</u>	<u>\$1,209,361.32</u>

(F) If the extra cost of handling Intrastate freight is found to be 50% instead of 100%, then the result would be as follows:

	Freight.	Per cent.	Passenger.	Per cent.
Intrastate Revenue	\$640,248.17	.....	\$836,542.20	.....
Increase representing extra cost:				
Freight	320,124.08	.....	.....	.....
Passenger .....	.....	.....	125,481.33	.....
Total	\$960,372.25	18.85	\$962,023.53	62.86
Interstate Revenue	4,133,210.33	81.15	568,476.21	37.14
Grand Total	\$5,093,582.58	100.00	\$1,530,499.74	100.00

The total expense shown in paragraph B, divided on percentages shown above is as follows:

Freight.	Amount.	Per cent.
Intrastate	\$630,705.97	12.19
Interstate	2,715,214.31	52.46
Total	\$3,345,920.28	
Miscellaneous	86,144.83	1.66
Total Freight	\$3,432,065.11	66.31

Passenger.		
Intrastate	\$865,571.12	16.73
Interstate	511,411.25	9.88
Total	\$1,376,982.37	
Miscellaneous		7.08
Total Passenger	\$1,743,236.33	33.69
Grand Total	\$5,175,301.44	100.00

Dividing the State's valuation of \$40,312,044.00 between each class of traffic on the per cents shown above, the result is as follows:

	Assessed valuation.	One-half valuation.	Six per cent for six months on valuation.
Freight.			
Intrastate	\$4,914,038.17	\$2,457,019.09	\$147,421.14
Interstate	21,147,698.28	10,573,849.14	634,430.95
Miscellaneous	669,179.93	334,589.96	20,075.40
Passenger.			
Intrastate	\$6,744,204.96	\$3,372,102.48	\$202,326.15
Interstate	3,982,829.95	1,991,414.97	119,484.90
Miscellaneous	2,854,092.71	1,427,046.36	85,622.78
Grand Total	\$40,312,044.00	\$20,156,022.00	\$1,209,361.32

St. Louis, Iron Mountain & Southern Railway Company.

STATEMENT No. 5.

Miscellaneous Statistics, Relative to the Business Handled During Six Months Ending December 31st, 1907.

Track Mileage, State of Arkansas.....	1,353.02 Miles		
Number of tons moved.....	Intrastate.	Interstate.	Total
Number of tons moved one mile.....	684,122	2,739,131	3,423,253
Percentage of total tons.....	47,860,299	612,303,696	660,163,995
Percentage of total ton miles.....	19.98%	80.02%	100%
Average length of haul-miles.....	7.25%	92.73%	100%
	70	224	193
Revenue from freight.....	\$640,248.17	\$4,133,210.33	\$4,773,458.50
Revenue per ton—Dollars.....	0.9359	1.5089	1.3944
Revenue per ton per mile—mills.....	13.377	6.750	7.231
Percentage of total freight revenue.....	13.41%	86.59%	100%
Number of passengers carried.....	1,444,540	257,950	1,702,490
No. of passgrs. carried one mile.....	43,355,996	30,486,624	73,842,620
Percentage of total passengers.....	84.85%	15.15%	100%
Percentage of total passgr. miles.....	58.71%	41.29%	100%
Average length of journey—miles.....	30	118	43

	Uniten Stated.	Group No. 8.	St. L., I. M. & S. Ry., six months ending December 31st, 1907.	State of Arkan- sas, six months ending Decem- ber 31st, 1907.
Other Freight Revenue.....	\$6,113,648	\$200,870	\$221,562	\$26,932
% of total revenue.....	0.24	0.08	1.79	0.40
Other Earnings from Operation.....	\$74,346,795	\$8,403,817	\$225,600	\$117,061
% of total revenue.....	2.87	3.41	1.82	1.76
Total Earnings from Operation.....	\$2,589,105,578	\$246,716,865	\$12,385,947	\$6,675,077
	100.00	100.00	100.00	100.00
Operating Expenses:				
Maint. of Way & Struct.....	\$343,544,907	\$33,933,442	\$2,007,840	\$1,054,677
% of total expense.....	19.65	21.38	21.83	21.39
Maint. of Equipment.....	\$368,061,728	\$30,318,677	\$1,892,321	\$1,035,566
% of total expense.....	21.05	19.10	20.58	21.00
Conducting Transportation.....	\$970,952,924	\$86,326,515	\$4,762,949	\$2,547,997
% of total expense.....	55.53	54.39	51.80	51.67
General Expense.....	\$65,404,655	\$8,039,954	\$532,629	\$292,985
% of total expense.....	3.74	5.06	5.79	5.94
Operating Expenses:				
Unclassified.....	\$551,600	\$108,623	.....	.....
% of total expense.....	0.03	0.07	.....	.....
Total Operating Expense.....	\$1,748,515,814	\$158,727,211	\$9,195,739	\$4,931,225
	100.00	100.00	100.00	100.00

Percentage of earnings:

Passenger	21.81	21.63	19.33	21.05
Freight	70.44	69.73	72.06	71.51
Other	7.75	8.64	8.61	7.44

Total	100.00	100.00	100.00	100.00
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Percentage of expenses to Earnings.....

	67.53	64.34	74.24	73.88
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Passenger Statistics:

Passenger Train Miles.....	509,328,042	49,988,078	2,470,022	1,461,474
No. of Passengers carried.....	873,905,133	39,469,631	2,819,020	1,702,490
No. of Passgrs. carried one mile.....	27,718,554,030	2,295,286,905	120,919,916	73,842,620
Average No. of Passgrs. per train mile.....	51	42	47	49
Average length of journey.....	31.72	58.15	42.89	43.37
Av. Rev. per passgr. per mile (cents).....	2.014	2.291	1.980	1.903
Av. Rev. from each passgr. (Dollars).....	.64600	1.33293	.84920	.82527
Density of Passenger Traffic.....	123,259	72,939	46,523	54,576

Freight Statistics:

Freight Train Mileage.....	629,995,723	61,399,583	3,078,251	1,561,258
Number of tons carried.....	1,796,336,659	99,658,448	5,395,603	3,423,253
No. of tons carried one mile.....	236,601,390,103	17,406,430,971	1,228,717,919	660,163,995
Av. No. of tons per train mile.....	357.35	265.35	385.68	407.41
Av. length of haul.....	131.71	174.66	227.73	192.85
Av. Rev. per ton per mile (cents).....	.759	.966	.726	.723
Av. Rev. from each ton carried (dollars).....	1.05428	1.91291	1.65413	1.39442
Density of Freight Traffic.....	1,052,119	553,139	472,738	487,919

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5275

EXHIBIT EIGHT.

5276

EXHIBIT No. 8.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of the Earnings and Expenses of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas for Six Months Ending June 30th, 1907.

A. The Gross Revenue of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas, for the period mentioned above, is as follows:

	Amount.	Per cent of Freight revenue.	Per cent of All revenue.
Intrastate Freight	\$544,929.60	11.52%	8.46%
Interstate Freight	4,143,101.79	87.60	64.30
Miscellaneous Freight	41,381.25	0.88	0.64
Total.....	\$4,729,412.64	100.00	73.40
		Per cent of passgr. earnings.	
Intrastate Passenger	\$726,679.60	42.40%	11.28%
Interstate Passenger	623,402.50	36.37	9.67
Misc'l. Passenger	363,927.18	21.23	5.65
Total.....	\$1,714,009.28	100.00	26.60
Grand Total.....	\$6,443,421.92	.....	100.00

B. The total Operating Expenses and Fixed Charges of the St. Louis, Iron Mountain & Southern Railway Company in the State of Arkansas, for the period mentioned, are as follows:

	Freight.	Passenger.	Total.
Maint. of Way & Struct.....	\$384,112.07	\$314,398.01	\$698,510.08
Maint. of Equipment.....	741,481.50	314,933.05	1,056,414.55
Traffic Expenses	79,901.77	53,731.08	133,632.85
Transportation Expenses	1,424,342.53	624,662.70	2,049,005.23
General Expenses	165,636.50	119,746.82	285,383.32
Total.....	\$2,795,474.37	\$1,427,471.66	\$4,222,946.03
Taxes	\$147,891.55	\$53,212.00	\$201,103.55
Rentals	18,657.33	6,712.99	25,370.32
Grand Total.....	\$2,962,023.25	\$1,487,396.65	\$4,449,419.90

C. The assessment of the State Board of Equalization, for the purpose of taxation was \$20,156,022.00, and, if multiplied by two and divided between the freight and passenger traffic in proportion to the gross earnings of each class of traffic, would be as follows:

	Freight.	Passenger.	Total.
Total Assessed Valuation for six months.....	\$14,822,738.58	\$5,333,283.42	\$20,156,022.00
Six Per cent Interest on above.....	889,364.31	319,997.01	1,209,361.32
Seven Per cent Interest.....	1,037,591.70	373,329.84	1,410,921.54
Eight Per cent Interest.....	1,185,819.09	426,662.67	1,612,481.76

D. Recapitulation—Total Business—State of Arkansas.

5277

	Freight.	Passenger.	Total.
Gross Revenue	\$4,729,412.64	\$1,714,009.28	\$6,443,421.92
Operating Expenses	2,795,474.37	1,427,471.66	4,222,946.03
Net Operating Revenue	\$1,933,938.27	\$286,537.62	\$2,220,475.89
Less Taxes and Rentals	166,548.88	59,924.99	226,473.87
Balance	\$1,767,389.39	\$226,612.63	\$1,994,002.02

Per cent of return on the assessed value of the property
after deducting Taxes and Rentals.....

9.89%

4.25%

11.92%

E. Results for the year ending December 31st, 1907—Total Business.

	Freight.	Passenger.	Total.
Surplus six months ending June 30th, 1907	\$1,767,389.39	\$226,612.63	\$1,994,002.02
Surplus six months ending December 31st, 1907	\$1,464,207.80	\$35,567.55	\$1,499,775.35
Total	\$3,231,597.19	\$262,180.18	\$3,493,777.37

Return on the assessed value of the property

8.67%

2.45%

10.91%

F. The Intrastate gross freight and passenger revenue for the period shown above is as follows:

	Freight.	Passenger.	Total.
Gross Revenue	\$544,929.60	\$726,679.60	\$1,271,609.20
Operating Expenses including Taxes and Rentals	341,225.08	630,656.18	971,881.26
Leaving	<u>\$203,704.52</u>	<u>\$96,023.42</u>	<u>\$299,727.94</u>

From the sums thus left there should be deducted such amounts as the Court may find to represent the extra cost of handling Intrastate traffic. This extra cost is shown under various percentages in statements attached, and the result of deducting the extra cost is as follows:

	Freight.	Passenger.	
Balance, after deducting taxes and rentals.....	\$203,704.52	\$96,023.42	
Extra cost @ 50%.....	134,741.86	Extra cost @ 15%.....	49,105.03
Surplus.....	<u>\$68,962.66</u>	Surplus.....	<u>\$46,918.39</u>
Extra cost @ 100%.....	\$255,506.36	Extra cost @ 25%.....	\$78,796.44
Deficit.....	<u>\$51,801.84</u>	Surplus.....	<u>\$17,226.98</u>
Extra cost @ 150%.....	\$364,529.86	Extra cost @ 35%.....	\$106,203.89
Deficit.....	<u>\$160,825.34</u>	Deficit.....	<u>\$10,180.47</u>
Extra cost @ 200%.....	\$463,210.10	Extra cost @ 50%.....	\$143,746.40
Deficit.....	<u>\$259,505.58</u>	Deficit.....	<u>\$47,722.98</u>

5278 G. Assuming that the property is worth at least the amount of the State's valuation for purposes of taxation, and dividing that valuation on the basis of revenue, the amount to be assigned to each class of traffic is as follows:

Freight	11.52% of \$14,822,738.58 or \$1,707,579.48.
Passenger	42.40% of \$5,333,283.42 or \$2,261,312.17.

Allowing 50% for the extra cost of handling State freight and 15% for handling State passengers, the return upon the value of the property would be as follows:

Freight.....	4.04%	Passenger.....	2.07%	Total.....	2.92%
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H. Results for the year ending December 31st, 1907, Intrastate Traffic.

	Freight.	Passenger.	Total.
Surplus six months ending June 30th, 1907	\$203,704.52	\$96,023.42	\$299,727.94
Surplus six months ending December 31st, 1907	191,334.05	16,698.16	208,032.21
Total.....	\$395,038.57	\$112,721.58	\$507,760.15
Extra cost:			
Freight	50%	\$308,128.62	\$415,802.48
Passenger	15%	.....	.....
Balance.....		\$86,909.95	\$91,957.67

Making no allowance for extra cost, the return upon the State's valuation is:

Freight.....	10.84%	Passenger.....	2.35%	Total.....	6.02%
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Allowing 50% for the extra cost of Intrastate freight and 15% for passenger, the return upon the State's valuation is:

Freight..... 2.39% Passenger..... 0.11% Total..... 1.09%

5279

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Extra Cost of State Freight, Revenue Basis.

(A) At 50%.

State	11.52% x 1½ =	17.28 =	16.34,	Difference	4.82+
Interstate	87.60	87.60	82.83,		4.77—
Miscellaneous	0.88	0.88	0.83,		.05—
Total.....	100.00	105.76	100.00		

The extra cost is 4.82% of \$2,795,474.37 or \$134,741.86.

(B) At 100%.

State	11.52% x 2 =	23.04 =	20.66,	Difference	9.14+
Interstate	87.60	87.60	78.55,		9.05—
Miscellaneous	0.88	0.88	0.79		.09—
Total.....	100.00	111.52	100.00		

The extra cost is 9.14% of \$2,795,474.37 or \$255,506.36.

(C) At 150%.

State	11.52% x 2½ =	28.80 =	24.56,	Difference	13.04+
Interstate	87.60	87.60	74.69,		12.91—
Miscellaneous	0.88	0.88	0.75,		.13—
Total.....	100.00	117.28	100.00		
The extra cost is 13.04% of \$2,795,474.37 or \$364,529.86.					

(D) At 200%.

State	11.52% x 3 =	34.56 =	28.09,	Difference	16.57+
Interstate	87.60	87.60	71.20,		16.40—
Miscellaneous	0.88	0.88	0.71,		.17—
Total.....	100.00	123.04	100.00		
The extra cost is 16.57% of \$2,795,474.37 or \$463,210.10.					

5280

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Extra Cost of State Passenger Business, Revenue Basis.

(A) At 15%.

State	42.40% x 1.15 =	48.76 =	45.84	Difference	3.44+
Interstate	36.37	36.37	34.20		2.17—
Miscellaneous	21.23	21.23	19.96		1.27—
Total.....	100.00	106.36	100.00		

The extra cost is 3.44% of \$1,427,471.66 or \$49,105.03.

(B) At 25%.

State	42.40% x 1.25 =	53.00 =	47.92	Difference	5.52+
Interstate	36.37	36.37	32.88		3.49—
Miscellaneous	21.23	21.23	19.20		2.03—
Total.....	100.00	110.60	100.00		

The extra cost is 5.52% of \$1,427,471.66 or \$78,796.44.

(C) At 35%.

State	42.40 x 1.35 =	57.24 =	49.84	Difference	7.44+
Interstate	36.37	36.37	31.67		4.70—
Miscellaneous	21.23	21.23	18.49		2.74—
Total.....	100.00	114.84	100.00		

The extra cost is 7.44% of \$1,427,471.66 or \$106,203.89.

(D) At 50%.

State	42.40 x 1½ =	63.60 =	52.47	Difference	10.07+
Interstate	36.37	36.37	30.01		6.36—
Miscellaneous	21.23	21.23	17.52		3.71—
Total.....	100.00	121.20	100.00		

The extra cost is 10.07% of \$1,427,471.66 or \$143,746.40.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5281

EXHIBIT EIGHTA.

5282

EXHIBIT 8a.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending June 30th, 1907, and Interest Thereon at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment of 1909.
Proportion assignable to Freight Traffic for six months ending June 30th, 1907 (73.40%)	\$14,675,068.99	\$15,012,711.92	\$17,669,452.08
Six per cent on above	880,504.14	900,762.72	1,060,167.12
Seven per cent	1,027,254.83	1,050,889.83	1,236,861.65
Eight per cent	1,174,005.52	1,201,016.95	1,413,556.17
Proportion assignable to Passenger Traffic for six months ending June 30th, 1907 (26.60%)	\$5,318,213.01	\$5,440,574.08	\$6,403,370.92
Six per cent on above	319,092.78	326,434.44	384,202.26
Seven per cent	372,274.91	380,840.19	448,235.96
Eight per cent	425,457.04	435,245.93	512,269.67
Proportion assignable to the Total Traffic for six months ending June 30th, 1907	\$19,993,282.00	\$20,453,286.00	\$24,072,823.00
Six per cent on above	1,199,596.92	1,227,197.16	1,444,369.38
Seven per cent	1,399,529.74	1,431,730.02	1,685,097.61
Eight per cent	1,599,462.56	1,636,262.88	1,925,825.84

Per cent of return on the assessed value of the Property as shown by the net earnings of all traffic for six months ending June 30, 1907 (Exhibit 8, Paragraph D) :

Freight	12.04%	11.77%	10.00%
Passenger	4.26%	4.17%	3.54%
Total.....	9.97%	9.75%	8.28%
Proportion assignable to Intrastate Freight Traffic for six months ending June 30, 1907 (11.52%)	\$1,690,567.95	\$1,729,464.41	\$2,035,520.88

5283

PAGE 2.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for Six Months Ending June 30th, 1907, and Interest Thereon at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment. of 1909.
Per cent of return on the assessed value of the property, as shown by the net earnings from Interstate Freight Traffic for six months ending June 30, 1907 (Exhibit No. 8, Par. F) :			
No extra cost.....	12.05%	11.78%	10.01%
50% extra cost.....	4.08%	3.99%	3.39%
Proportion assignable to Intrastate Passenger Traffic for six months ending June 30, 1907 (42.40%)	\$2,254,922.32	\$2,306,803.41	\$2,715,029.27

Per cent return on the assessed value of the property as shown by the net earnings from Intrastate passenger traffic for six months ending June 30th, 1907 (Exhibit 8, Par. F):

No Extra cost.....	4.26%	4.16%	3.54%
Proportion assignable to all Intrastate Traffic as shown above	\$3,945,490.27	\$4,036,267.82	\$4,750,550.15

Per cent of return upon the assessed value as shown by the net earnings from all Intrastate Traffic (Exhibit 8, Par. F):

No extra cost.....	7.60%	7.43%	6.31%
50% extra cost for freight only	4.18%	4.09%	3.47%

NOTE.—This is a revision of Exhibit No. 8, paragraph-C, D, F, and G, based on additional Assessments. The value of the property used in this statement is double the assessment as down in Exhibit 7a.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5284

EXHIBIT EIGHTb.

5285

EXHIBIT No. 8b.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for the Year Ending December 31st, 1907, and Interest Thereon at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment of 1909.
Proportion assignable to Freight Traffic.....	\$29,340,141.34	\$30,015,197.20	\$35,326,867.75
Six per cent on above.....	1,760,408.48	1,800,911.83	2,119,612.06
Seven per cent.....	2,053,809.89	2,101,063.80	2,472,880.74
Eight per cent.....	2,347,211.31	2,401,215.78	2,826,149.42
Proportion assignable to Passenger Traffic.....	\$10,646,422.66	\$10,891,374.80	\$12,818,778.25
Six per cent on above.....	638,785.36	653,482.49	769,126.69
Seven per cent.....	745,249.59	762,396.24	897,314.48
Eight per cent.....	851,713.81	871,309.98	1,025,502.26
Total Valuation	\$39,986,564.00	\$40,906,572.00	\$48,145,646.00
Six per cent on above.....	2,399,193.84	2,454,394.32	2,888,738.75
Seven per cent.....	2,799,059.48	2,863,460.04	3,370,195.22
Eight per cent.....	3,198,925.12	3,272,525.76	3,851,651.68

Per cent of return on the value of the Property as shown by the net earnings on all traffic for the year (Exhibit No. 8, Par. E.):

Freight	11.01%	10.77%	9.15%
Passenger	2.46%	2.41%	2.05%
	<u>8.74%</u>	<u>8.54%</u>	<u>7.26%</u>
Total.....			
Proportion assignable to Intrastate Freight Traffic.....	\$3,608,759.41	\$3,691,789.48	\$4,345,110.85

Per cent of return on the value as shown by the net earnings from Intrastate freight traffic (Exhibit 8, Par. H):

No. extra cost.....	10.95%	10.70%	9.09%
50% extra cost.....	2.41%	2.35%	2.00%
Proportion assignable to Intrastate Passenger Traffic....	\$4,760,779.32	\$4,870,314.99	\$5,732,195.34

Per cent of return on the value as shown by the net earnings from Intrastate Passenger traffic (Exhibit 8, Par. H):

No extra cost.....	2.37%	2.31%	1.97%
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5286-5288

PAGE 2.

Assessed Value of the Property Divided Between Freight and Passenger Traffic for the Year Ending December 31st, 1907, and Interest Thereon at Various Rates.

	Assessment of 1907.	Assessment of 1908.	Assessment of 1909.
Proportion assignable to all Intrastate Traffic.....	\$8,369,538.73	\$8,562,104.47	\$10,077,306.19
Per cent of return on the value as shown by the net earnings from all Intrastate traffic (Exhibit 8, Par. H) :			
No extra cost.....	6.07%	5.93%	5.04%
50% extra cost for freight only.....	2.39%	2.33%	1.98%

NOTE.—This is a revision of Exhibit No. 8, paragraph-E and H, based on additional Assessments. The value of the property used in this statement is double the assessment as shown in Exhibit 7.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

St. Louis Southwestern Railway Company.

Number of Miles Operated.

Main Line:	Miles Owned.	Miles Leased.	Total Miles.	Miles in Arkansas.
St. Louis to Illmo.....	....	138.2	138.2	....
Illmo, Mo., to Texarkana, Tex.....	412.3	13.5	425.8	348.9
Gray's Point Branch:				
Illmo, Mo., to Gray's Pt., Mo.....	....	3.1	3.1	....
Cairo Branch:				
Bird's Pt., Mo., to Malden, Mo.....	57.7	....	57.7	....
New Madrid Branch:				
Lilbourn, Mo., to New Madrid, Mo.....	6.1	....	6.1	....
Stuttgart Branch:				
Stuttgart, Ark., to Gillett, Ark.....	35.1	....	35.1	35.1
Little Rock Branch:				
Altheimer, Ark., to Little Rock, Ark.....	44.4	....	44.4	44.4

Shreveport Branch:

Lewisville, Ark., to Shreveport, La.....	62.6	....	62.6	23.8
	<u>618.2</u>	<u>154.8</u>	<u>773.0</u>	<u>452.2</u>

NOTE.—The Paragould Southeastern Railway Company and Pine Bluff Arkansas River Railway are operated by officers of the St. Louis Southwestern Railway Company, but are separate and distinct corporations and their accounts are kept separate and independent of the accounts of the St. Louis Southwestern Railway Company.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5294

EXHIBIT TWELVE.

5295

EXHIBIT 12.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of Operating Revenues, Operating Expenses, Taxes, and Rentals, Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenues, Expenses, Taxes, and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express, and Miscellaneous for Year Ending June 30th, 1908.

Expenses, Taxes, and Rentals, as well as the State's valuation of Property, Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

Freight.

Item.	Operating revenues.	Per cent.	Operating expenses, taxes, and rentals.	Valuation (total based on State Board's assessment).
Freight—State	\$315,908.00	9.79	\$171,851.68	\$1,359,996.05
Freight—Interstate	2,867,701.62	88.87	1,560,006.05	12,345,541.25
Miscellaneous	43,099.94	1.34	23,522.09	186,148.59
Total Freight.....	\$3,226,709.56	100.00	\$1,755,379.82	\$13,891,685.89

Passenger.

Passenger—State	\$440,452.64	48.76	\$440,563.37	\$1,896,049.23
Passenger—Interstate	305,434.56	33.81	305,484.98	1,314,713.38
Mail, Express & Misc.....	157,414.69	17.43	157,486.04	677,771.50
Total Passenger.....	\$903,301.89	100.00	\$903,534.39	\$3,888,534.11
Grand Total.....	\$4,130,011.45	.....	\$2,658,914.21	\$17,780,220.00

Summary, State Traffic Only.

	Freight.	Equal to return of	Passenger.	Equal to return of	Total.	Equal to return of
State Revenue	\$315,908.00	....	\$440,452.64	....	\$756,360.64	....
State Expenses, Taxes and Rentals on a Revenue basis with no allowance for Extra Cost	171,851.68	....	440,563.37	....	612,415.05	....
Balance.....	\$144,056.32	10.60%	110.73†	None	\$143,945.59	4.42%
Extra Cost:						
*Frt. 50%—Pass. 25%.....	74,548.74	....	48,291.45	....	122,840.19	....
Balance.....	\$69,507.58	5.11%	\$48,402.18†	None	\$21,105.40	0.65%
†Frt. 100%—Pass. 15%.....	142,545.69	....	30,258.02	....	172,803.71	....
Balance.....	\$1,510.63	0.11%	\$30,368.75†	None	\$28,858.12†	None

Return on State Valuation at following rates would be:

	Freight.	Passenger.	Total.
At 6%.....	\$81,599.76	\$113,762.95	\$195,362.71
At 7%.....	95,199.72	132,723.44	227,923.16
At 8%.....	108,799.68	151,683.93	260,483.61

*Minimum ratios of Extra Cost found in the Missouri Case.

†Minimum ratios of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[‡In red ink in copy.]

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of Operating Revenues, Operating Expenses, Taxes, Rentals, and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenues, Expenses, Taxes, and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express, and Miscellaneous, for Year Ending June 30th, 1908.

Expenses, Taxes, Rentals, and Outside Operations (Deficit), Divided Between the Different Classes of Traffic and Between State and Interstate on Revenue Basis.

Freight.

Item.	Operating revenues.	Per cent.	Operating expenses, taxes, rentals, and outside operations (deficit).
Freight—State	\$315,908.00	9.79	\$174,778.43
Freight—Interstate	2,867,701.62	88.87	1,586,573.94
Miscellaneous	43,099.94	1.34	23,922.68
Total Freight.....	\$3,226,709.56	100.00	\$1,785,275.05
<i>Passenger.</i>			
Passenger—State	\$440,452.64	48.76	\$441,771.64
Passenger—Interstate	305,434.56	33.81	306,322.79
Mail, Express & Misc.....	157,414.69	17.43	157,917.96
Total Passenger.....	\$903,301.89	100.00	\$906,012.39
Grand Total.....	\$4,130,011.45	.....	\$2,691,287.44

Summary, State Traffic Only.

	Freight.	Passenger.	Total.
State Revenue	\$315,908.00	\$440,452.64	\$756,360.64
State Expenses, Taxes, Rentals and Outside Operations (Def.), on a revenue basis with no allowance for extra cost	174,778.43	441,771.64	616,550.07
Balance	\$141,129.57	\$1,319.00†	\$139,810.57
Extra Cost:			
*Frt. 50%—Pass. 25%	74,548.74	48,291.45	122,840.19
Balance	\$66,570.83	\$49,610.45†	\$116,181.28
†Frt. 100%—Pass. 15%	142,545.69	30,258.02	172,803.71
Balance	\$1,416.12†	\$31,577.02†	\$32,993.14†

*Minimum ratio of Extra Cost found in the Missouri Case.

†Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.

[†In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5297
5298EXHIBIT TWELVE.
EXHIBIT 12a.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of Operating Revenues, Operating Expenses, Taxes, Rentals and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenue, Expenses, Taxes and Rentals for Interstate Freight and Passenger Traffic and All of Mail, Express and Miscellaneous, for Year Ending June 30th, 1908.

Expenses, Taxes, Rentals and Outside Operations (Deficit), Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

Freight.

Item.	Operating revenues.	Per cent.	Operating expenses, taxes, rentals, and outside operations (deficit).
Freight—State	\$315,908.00	9.79	\$174,778.43
Freight—Interstate	2,867,701.62	88.87	1,586,573.94
Miscellaneous	43,099.94	1.34	23,922.68
Total Freight.....	\$3,226,709.56	100.00	\$1,785,275.05
<i>Passenger.</i>			
Passenger—State	\$440,452.64	48.76	\$441,771.64
Passenger—Interstate	305,434.56	33.81	306,322.79
Mail, Express & Misc.....	157,414.69	17.43	157,917.96
Total Passenger.....	\$903,301.89	100.00	\$906,012.39
Grand Total.....	\$4,130,011.45	.....	\$2,691,287.44

Summary, State Traffic Only.

	Freight.	Passenger.	Total
State Revenue	\$315,908.00	\$440,452.64	\$756,360.64
State Expenses, Taxes, Rentals and Outside Operations (Def.), on a revenue basis with no allowance for extra cost	174,778.43	441,771.64	616,550.07
Balance.....	\$141,129.57	\$1,319.00†	\$139,810.57
Extra cost:			
*Frt. 50%—Pass. 25%.....	74,423.30	37,726.63	112,149.93
Balance.....	\$66,706.27	\$39,045.63†	\$27,660.64
†Frt. 100%—Pass. 15%.....	142,033.20	23,838.65	165,871.85
Balance.....	903.63‡	\$25,157.65‡	\$26,061.28‡

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.

[‡ In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5299

EXHIBIT THIRTEEN.

5300

EXHIBIT 13.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes or Rentals.)

	Freight.	Passenger.
Total Operating Expenses, Taxes and Rentals.....	\$1,755,379.82	\$903,534.39
Less Taxes and Rentals.....	15,374.11†	36,542.46
Total Operating Exps. Only.....	\$1,770,753.93	\$866,991.93
* Freight @ 50%.		
State Revenue	9.79 x 1½ = 14.69 =	14.00 Difference 4.21% +
Interstate & Misc. Rev.....	90.21	86.00 4.21%—
	<u>100.00</u>	<u>104.90</u> 100.00

The Extra Cost is 4.21% of \$1,770,753.93 or \$74,548.74.

† Freight @ 100%.

State Revenue	9.79 x 2 =	19.58 =	17.84	Difference	8.05% +
Interstate & Misc. Rev.....	90.21	90.21	82.16		8.05% —
	<u>100.00</u>	<u>109.79</u>	<u>100.00</u>		

The Extra Cost is 8.05% of \$1,770,753.93 or \$142,545.69.

* Passenger @ 25%.

State Revenue	48.76% x 1.25 =	60.95 =	54.33	Difference	5.57% +
Interstate and Mail, Express and Misc. Revenue	51.24	51.24	45.67		5.57% —
	<u>100.00</u>	<u>112.19</u>	<u>100.00</u>		

The Extra Cost is 5.57% of \$866,991.93 or \$48,291.45.

† Passenger @ 15%.

State Revenue	48.76 x 1.15 =	56.07 =	52.25	Difference	3.49% +
Interstate and Mail, Express and Misc. Revenue	51.24	51.24	47.75		3.49% —
	<u>100.00</u>	<u>107.31</u>	<u>100.00</u>		

The Extra Cost is 3.49% of \$866,991.93 or \$30,258.02.

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.
[† In red ink in copy.]

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes or Rentals.)

	Freight.	Passenger.
Total Operating Expenses, Taxes, Rentals and Outside Operations (Def.)	\$1,785,275.05	\$906,012.39
Less Taxes and Rentals	14,521.12	39,020.46
Total Operating Expenses only	\$1,770,753.93	\$866,991.93

* Freight at 50%.

State Revenue	9.79 x $1\frac{1}{2}$ =	14.69 =	14.00	Difference	4.21% +
Interstate & Misc. Rev.	90.21	90.21	86.00		4.21% —
	<u>100.00</u>	<u>104.90</u>	<u>100.00</u>		

The Extra Cost is 4.21% of \$1,770,753.93 or \$74,548.74.

† Freight @ 100%.

State Revenue	9.79 x 2 =	19.58 =	17.84	Difference	8.05% +
Interstate & Misc. Rev.	90.21	90.21	82.16		8.05% —
	<u>100.00</u>	<u>109.79</u>	<u>100.00</u>		

The Extra Cost is 8.05% of \$1,770,753.93 or \$142,545.69.

* Passenger @ 25%.

State Revenue	48.76%	$1.25 =$	60.95	$=$	54.33	Difference	5.57%+
Interstate and Mail, Express and Misc. Revenue	51.24		51.24		45.67		5.57%—
	<u>100.00</u>		<u>112.19</u>		<u>100.00</u>		

The Extra Cost is 5.57% of \$866,991.93 or \$48,291.45.

† Passenger @ 15%.

State Revenue	48.76	$x 1.15 =$	56.07	$=$	52.25	Difference	3.49%+
Interstate and Mail, Express and Misc. Revenue	51.24		51.24		47.75		3.49%—
	<u>100.00</u>		<u>107.31</u>		<u>100.00</u>		

The Extra Cost is 3.49% of \$866,991.93 or \$30,258.02.

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Vandever in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT THIRTEENA.

5302

EXHIBIT 13a.

5303

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement Showing How the Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Year Ending June 30th, 1908. (Extra Cost Applied to Operating Expenses Only; Not to Taxes, Rentals, etc.)

	Freight.	Passenger.
Total Operating Expenses (excluding Taxes, Rentals and Outside Operations) (Def.).....	\$1,770,753.93	\$866,991.93
Less Mail, Express & Miscellaneous, Prop'n Frt. 1.34%—		
Pass. 17.43%.....	23,728.10	151,116.69
Total Operating Expenses only, chargeable to Frt. & Pass. Traffic	\$1,747,025.83	\$715,875.24
* Freight @ 50%.		
State Frt. Revenue.....	\$315,908.00 —	9.92% x 1½ = 14.88 = 14.18
Interstate Frt. Rev.....	2,867,701.62 —	90.08% = 90.08 = 85.82
	\$3,183,609.62	100.00% = 104.96 = 100.00
		Diff. 4.26% + 4.26% —

The Extra Cost is 4.26% of \$1,747,025.83 or \$74,423.30.

	† Freight @ 100%.	
State Frt. Revenue.....	\$315,908.00 —	9.92% x
Interstate Frt. Rev.....	2,867,701.62 —	90.08%
	<u>2,867,701.62</u>	
↓	\$3,183,609.62 —	100.00%
	<u>109.02</u>	100.00

8.13% +
8.13% —

The Extra Cost is 8.13% of \$1,747,025.83 or \$142,033.20.

	* Passenger @ 25%.	
State Pass. Rev.....	\$440,452.64 —	59.05% x 1 1/4 =
Interstate Pass. Rev.....	305,434.56 —	40.95%
	<u>305,434.56</u>	
	\$745,887.20 —	100.00%
	<u>114.76</u>	100.00

5.27% +
5.27% —

The Extra Cost is 5.27% of \$715,875.24 or \$37,726.63.

	† Passenger @ 15%.	
State Pass. Rev.....	\$440,452.64 —	59.05% x 1.15 =
Interstate Pass. Rev.....	305,434.56 —	40.95%
	<u>305,434.56</u>	
	\$745,887.20 —	100.00%
	<u>108.86</u>	100.00

3.33% +
3.33% —

The Extra Cost is 3.33% of \$715,875.24 or \$23,838.65.

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Van Devanter in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT 14.

St. Louis Southwestern Railway Company, State of Arkansas.

Miscellaneous Traffic Statistics for Year Ending June 30th, 1908.

Miles operated in Arkansas..... 452.2 Miles.

Freight.

	State.	Interstate.	Total.
Tons carried	339,749	1,431,855	1,771,604
Tons carried one mile.....	15,082,098	330,935,620	346,017,718
Tons carried one mile per mile of road.....	33,353	731,834	765,187
Avg. distance haul per ton—in miles.....	44	231	195
Percentage of total tons.....	19.2	80.8	100.0
Percentage of tons one mile.....	4.4	95.6	100.0
Percentage of freight revenue.....	9.9	90.1	100.0

Passenger.

Passengers carried	928,313	145,351	1,073,664
Passengers carried one mile.....	21,981,242	17,696,245	39,677,487
Pass. carried one mile per mile of road.....	48,609	39,134	87,743
Avg. distance haul per pass.—in miles.....	23	121	36
Percentage of total passengers.....	86.5	13.5	100.0
Percentage of passengers one mile.....	55.4	44.6	100.0
Percentage of passenger revenue.....	59.1	40.9	100.0

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT FIFTEEN.

5306

EXHIBIT 15.

5307

St. Louis Southwestern Railway Company.

Statement of Assessed Valuation of Property in the State of Arkansas for the Year 1908, and Proportion Assignable to State Freight and Passenger Traffic on Basis of the Revenue for the Year Ending June 30, 1908.

The value of the property of the Company in Arkansas, used in operating, is assessed by the State for the year 1908, at..... \$7,014,817.00
Said assessment is on the basis of 50% of the value, making the State's valuation of the property in Arkansas 14,029,634.00

	Freight.	Passenger.
Said valuation divided between Total Freight and Passenger business, on a Revenue basis, is.....	\$10,961,353.04	\$3,068,280.96
Deduct: Miscellaneous proportion, Frt. 1.34%—Pass. 17.43% (Ex. 12-A) ..	146,882.13	534,801.37
Total valuation assignable to Frt. and Pass. Traffic only	\$10,814,470.91	\$2,533,479.59

Valuation Assignable to State Freight and Passenger Traffic Only, and Amount of Returns Thereon, Figured at Rates Shown.

Basis	Valuation.	Return @ 6%.	Return @ 7%.	Return @ 8%.
(per cents taken from Ex. 13-A).				
Straight Revenue Basis— 9.92%.....	\$1,072,795.51	\$64,367.73	\$75,095.69	\$85,823.64
50% Extra Cost Basis—14.18%.....	1,533,491.98	92,009.52	107,344.44	122,679.36
100% Extra Cost Basis—18.05%.....	1,952,012.00	117,120.72	136,640.84	156,160.96

*Freight.

*Passenger.

Straight Revenue Basis—59.05%.....	\$1,496,019.70	\$89,761.18	\$104,721.38	\$119,681.58
25% Extra Cost Basis—64.32%.....	1,629,534.07	97,772.04	114,067.38	130,362.73
15% Extra Cost Basis—62.38%.....	1,580,384.57	94,823.07	110,626.92	126,430.77

*Total.

Straight Revenue Basis.....	\$2,568,815.21	\$154,128.91	\$179,817.07	\$205,505.22
Ex. Cost Basis—Frt. 50%—Pass. 25%.....	3,163,026.05	189,781.56	221,411.82	253,042.09
Ex. Cost Basis—Frt. 100%—Pass. 15%.....	3,532,396.57	211,943.79	247,267.76	282,591.73

NOTE.—The valuation used in this Exhibit differs from the valuation used in the affidavit at the hearing of the application for an injunction, on account of Special Taxes having been erroneously and unintentionally used in arriving at that valuation. Special Taxes are excluded from this statement.

*See Exhibit 12-A for Returns actually earned (Deficits in some instances) on the several bases shown hereon.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Field, D. C.

EXHIBIT SIXTEEN.

5308

EXHIBIT 16.

5309

St. Louis Southwestern Railway Company.

Statement of Assessed Valuation of Property in the State of Arkansas for the Year 1909, and Proportion Assignable to State Freight and Passenger Traffic on Basis of the Revenue for the Year Ending June 30th, 1908.

The value of the property of the Company in Arkansas, used in operating, is assessed by the Arkansas Tax Commission, for the year 1909, at \$8,890,110.00
 Said assessment is on the basis of 50% of the value, making the State's valuation of the property in Arkansas 17,780,220.00

	Freight.	Passenger.
Said valuation divided between Total Freight and Passenger business, for the year ending June 30, 1908, on a Revenue basis, is,	\$13,891,685.89	\$3,888,534.11
Deduct: Miscellaneous proportion, Frt. 1.34%—Pass. 17.43% (Ex. 12-A) ..	186,148.59	677,771.50
Total valuation assignable to Freight and Passenger Traffic only	\$13,705,537.30	\$3,210,762.61

Valuation Assignable to State Freight and Passenger Traffic Only, and Amount of Return Thereon, Figured at Rates Shown.

Basis	*Freight.	Return	Return
(per cent taken from Ex. 13-A).	Valuation.	@ 6%.	@ 8%.
Straight Revenue Basis— 9.92%	\$1,359,589.30	\$81,575.36	\$95,171.25
50% Extra Cost Basis—14.18%	1,943,445.19	116,606.71	136,041.16
100% Extra Cost Basis—18.05%	2,473,849.48	148,430.97	173,169.46
			\$108,767.14
			155,475.62
			197,907.96

*Passenger.

Straight Revenue Basis—59.05%.....	\$1,895,955.32	\$113,757.32	\$132,716.87	\$151,676.43
25% Extra Cost Basis—64.32%.....	2,065,162.51	123,909.75	144,561.38	165,213.00
15% Extra Cost Basis—62.38%.....	2,002,873.72	120,172.42	140,201.16	160,229.90

*Total.

Straight Revenue Basis.....	\$3,255,544.62	\$195,332.68	\$227,888.12	\$260,443.57
Ex. Cost Basis—Frt. 50%—Pass. 25%.....	4,008,607.70	240,516.46	280,602.54	320,688.62
Ex. Cost Basis—Frt. 100%—Pass. 15%.....	4,476,723.20	268,603.39	313,370.62	358,137.86

*See Exhibit 12-A for returns actually earned (deficits in some instances) on the several bases shown hereon.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT SEVENTEEN.

EXHIBIT 17.

St. Louis Southwestern Railway Company.

Bases Used in Dividing Operating Revenues Between "Freight" and "Passenger" and Between States.

Operating Revenues.

Item.	When common to Freight and passenger.	When common to two or more States.
Freight Revenue	Direct to Freight	Actual mileage pro-rate.
Passenger Revenue	Direct to Passenger	" "
Excess Baggage Revenue	" "	" "
Parlor & Chair Car Rev.	" "	Trk. Mi. prorate for ea. mail route.
Mail Revenue	" "	Rev. Passenger Train-miles.
Express Revenue	" "	" "
Other Pass. Tr. Revenue	Direct to Freight	Localize to each state.
Switching Revenue	Revenue Train-Miles	Actual mileage pro-rate.
Special Service Tr. Rev.	" "	Revenue Train-miles.
Misc. Transp. Rev.	" "	" "
Station and Train Privileges	Direct to Freight	Localize to each state.
Storage—Freight	Direct to Passenger	" "
Storage—Baggage	Direct to Freight	" "
Car Service	Revenue Train-miles	" "
Rents of bldgs. & Property	" "	Revenue Train-miles.
Miscellaneous		

5312

EXHIBIT EIGHTEEN.

5313

EXHIBIT 18.

St. Louis Southwestern Railway Company.

Accounting Department.

Supplement "A" to Circular No. 360.

(Cancels Supplement No. 1, Dated July 1, 1907.)

(Issued for Use of Accounting Department Only.)

Bases for Dividing Operating Expenses "Common to Entire Line" Between State Accounting Divisions and "Common" Between "Freight" and "Passenger."

St. Louis, Mo., July 1, 1908.

1. All items of expense charged "Common to Entire Line" must be divided between State Accounting Divisions on the bases as indicated by initials opposite each account, which bases are as follows:

- A.—Total revenue train-miles.
- B.—Track-miles maintained (excluding Illinois).
- C.—Total revenue locomotive-miles.
- D.—Total revenue passenger car-miles.
- E.—Total revenue freight car-miles.
- F.—Total revenue freight train-miles.
- G.—Total revenue passenger train-miles.

2. All items of expense charged "Common" must be divided as between "Freight" and "Passenger," on basis of Total Revenue Train-Miles.

Between
State accounting
divisions.

Accounts.

Maintenance of way and structures:

1. Superintendence	B
14. Telegraph and Telephone Lines	B
19. Injuries to Persons	B
20. Stationery and Printing	B
21. Other Expenses	B

Maintenance of equipment:

24. Superintendence	A
25. Steam Locomotives—Repairs	C
26. Steam Locomotives—Renewals	C
27. Steam Locomotives—Depreciation	C
31. Passenger-Train Cars—Repairs	D
32. Passenger-Train Cars—Renewals	D
33. Passenger-Train Cars—Depreciation	D
34. Freight-Train Cars—Repairs	E
35. Freight-Train Cars—Renewals	E

Between
State accounting
divisions.

Accounts.

Maintenance of equipment (Continued):

36. Freight-Train Cars—Depreciation	E
43. Work Equipment—Repairs	B
44. Work Equipment—Renewals	B
45. Work Equipment—Depreciation	B
46. Shop Machinery and Tools	A
48. Injuries to Persons	A
49. Stationery and Printing	A
50. Other Expenses	A

Traffic expenses:

53. Superintendence	F or G
54. Outside Agencies	F or G
55. Advertising	F or G
56. Traffic Associations	F or G
57. Fast Freight Lines	F or G
58. Industrial and Immigration Bureaus	F or G
59. Stationery and Printing	F or G
60. Other Expenses	F or G

Transportation expenses:

61. Superintendence	A
64. Weighing and Car Service Associations	F
81. Enginehouse Expenses—Road	C
82. Fuel for Road Locomotives	C

83. Water for Road Locomotives.....	C
84. Lubricants for Road Locomotives.....	C
85. Other Supplies for Road Locomotives.....	C
88. Road Trainmen	F, G or A
89. Train Supplies and Expenses.....	F, G or A
94. Telegraph and Telephone—Operation.....	A
97. Stationery and Printing.....	A
98. Other Expenses	A
101. Damages to Property	A
102. Damages to Stock on Right of Way.....	A
103. Injuries to Persons.....	A
General expenses:	
106. Salaries and Expenses of General Officers.....	A
107. Salaries and Expenses of Clerks and Attendants.....	A
108. General Office Supplies and Expenses.....	A
109. Law Expenses	A
110. Insurance	A or B
113. Stationery and Printing.....	A
114. Other Expenses	A

S. C. JOHNSON,
Gen'l Auditor.

File 2948.



ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

ACCOUNTING DEPARTMENT.

CIRCULAR No. 360

(Replaces Circular No. 344)

Rules for Assigning Operating Expenses to State Accounting Divisions and Dividing the Same Between "Freight" and "Passenger."

St. Louis, Mo., July 1, 1907.

STATE ACCOUNTING DIVISIONS.

1. Effective with the month of July, 1907, the accounts of the company will be kept by four accounting divisions, viz.: Illinois, Missouri, Arkansas and Louisiana. The assignment of operating expenses to state accounting divisions must be made strictly in accordance with the rules herein prescribed, except when otherwise specially instructed.
2. Operating expenses that are common to the entire line must be designated "Common to entire Line," and such items will be divided between state accounting divisions by the Accounting Department.
3. Operating expenses that can be localized to one or more state accounting divisions, and are not common to the entire line, must be assigned to the proper state accounting divisions direct, on the bases herein given.

DIVISION BETWEEN FREIGHT AND PASSENGER.

4. All operating expenses must be divided between "Freight" and "Passenger," after the assignment to state accounting divisions has been made. Items of operating expenses pertaining exclusively to freight business, or to passenger business, must be assigned direct to "Freight" or "Passenger," as the case may be; items which cannot be classed as exclusively "Freight" or "Passenger" must be designated "Common" and such items will be divided by the Accounting Department.
5. It is important that the division of operating expenses between "Freight" and "Passenger" be made very carefully. All concerned must bear in mind that while the figures obtained under these rules give approximate results only, they are to be used for the purpose of developing operating efficiency.
6. In the right-hand column of this circular, opposite each account, is indicated the assignment of the same with reference to "Freight" or "Passenger." Where the word "Direct" is shown, items must be directly assigned to "Freight" or "Passenger," as the case may be; all other items must be designated "Common," as indicated.

ACCOUNTS	BETWEEN STATE ACCOUNTING DIVISIONS	BETWEEN FREIGHT AND PASSENGER
MAINTENANCE OF WAY AND STRUCTURES—		
1. Superintendence.....	Divide on basis of track miles over which the employees whose wages are charged to this account have jurisdiction (excluding Illinois Division). When jurisdiction covers the entire line, designate "Common to Entire Line"	Common.
2. Ballast.....	Localize	Common.
3. Ties.....	Localize	Common.
4. Rails.....	Localize	Common.
5. Other Track Material.....	Localize	Common.
6. Roadway and Track.....	Localize	Common.
7. Removal of Snow, Sand, and Ice.....	Localize	Common.
8. Tunnels.....	Localize	Common.
9. Bridges, Trestles, and Culverts.....	Localize	Common.
10. Over and Under Grade Crossings.....	Localize	Common.
11. Grade Crossings, Fences, Cattle Guards, and Signs.....	Localize	Common.
12. Snow and Sand Fences and Snow Sheds.....	Localize	Common.
13. Signals and Interlocking Plants.....	Localize	Common.

ACCOUNTS	BETWEEN STATE ACCOUNTING DIVISIONS	BETWEEN FREIGHT AND PASSENGER
14. Telegraph and Telephone Lines.....	Localize, except as to salaries and expenses of Sup't Telegraph and his clerks, which should be designated "Common to Entire Line".	Common.
15. Electric Power Transmission.....	For use of Electric Lines only.	For use of Electric Lines only.
16. Buildings, Fixtures, and Grounds.....	Localize.	Direct or Common.
17. Docks and Wharves.....	Localize.	Number of Freight and Passenger cars handled over the same.
18. Roadway Tools and Supplies.....	Localize.	Common.
19. Work Equipment—Repairs.....	Localize when possible; otherwise designate "Common to Entire Line".	Common.
20. Work Equipment—Renewals.....	Common to Entire Line.	Common.
21. Work Equipment—Depreciation.....	Common to Entire Line.	Common.
22. Injuries to Persons.....	Localize, except as to salaries and expenses of Claim Agents and their clerks, which should be designated "Common to Entire Line".	Common.
23. Stationery and Printing.....	Localize when possible; otherwise designate "Common to Entire Line".	Direct or Common.
24. Insurance.....	Localize, except insurance on work equipment, which should be designated "Common to Entire Line".	Common.
25. Other Expenses.....	Localize when possible; otherwise designate "Common to Entire Line".	Direct or Common.
26. Maintaining Joint Tracks, Yards, and Other Facilities—Dr.....	Localize.	Direct or Common.
27. Maintaining Joint Tracks, Yards, and Other Facilities—Cr.....	Localize.	Common.
MAINTENANCE OF EQUIPMENT—		
28. Superintendence.....	Common to Entire Line.	Direct or Common.
29. Steam Locomotives—Repairs.....	Common to Entire Line.	Common.
30. Steam Locomotives—Renewals.....	The cost of repairing damages caused by accidents should be localized to the extent of the damage done.	Direct.
31. Steam Locomotives—Depreciation.....	Common to Entire Line.	Common.
32. Electric Locomotives—Repairs.....	Common to Entire Line.	Common.
33. Electric Locomotives—Renewals.....	For use of Electric Lines only.	For use of Electric Lines only.
34. Electric Locomotives—Depreciation.....	For use of Electric Lines only.	For use of Electric Lines only.
35. Passenger-Train Cars—Repairs.....	Common to Entire Line.	Direct.
36. Passenger-Train Cars—Renewals.....	Common to Entire Line.	Direct.
37. Passenger-Train Cars—Depreciation.....	Common to Entire Line.	Direct.
38. Freight-Train Cars—Repairs.....	Common to Entire Line.	Direct.
39. Freight-Train Cars—Renewals.....	Common to Entire Line.	Direct.
40. Freight-Train Cars—Depreciation.....	Common to Entire Line.	Direct.
41. Electric Equipment of Cars—Repairs.....	For use of Electric Lines only.	For use of Electric Lines only.
42. Electric Equipment of Cars—Renewals.....	For use of Electric Lines only.	For use of Electric Lines only.
43. Electric Equipment of Cars—Depreciation.....	For use of Electric Lines only.	For use of Electric Lines only.
44. Floating Equipment—Repairs.....	For use of lines operating floating equipment.	For use of lines operating floating equipment.
45. Floating Equipment—Renewals.....	For use of lines operating floating equipment.	For use of lines operating floating equipment.
46. Floating Equipment—Depreciation.....	For use of lines operating floating equipment.	For use of lines operating floating equipment.
47. Shop Machinery and Tools.....	Common to Entire Line.	Direct or Common.
48. Power Plant Equipment.....	For use of Electric Lines only.	For use of Electric Lines only.
49. Injuries to Persons.....	Common to Entire Line.	Direct or Common.
50. Stationery and Printing.....	Common to Entire Line.	Common.
51. Insurance.....	Common to Entire Line.	Direct or Common.
52. Other Expenses.....	Localize when possible; otherwise designate "Common to Entire Line".	Direct or Common.
53. Maintaining Joint Equipment at Terminals—Dr.....	Localize.	Direct.

ACCOUNTS	BETWEEN STATE ACCOUNTING DIVISIONS	BETWEEN FREIGHT AND PASSENGER
54. Equipment Borrowed—Dr.....	Charges to this account for cars must be divided on basis of the total car miles of foreign line cars, Freight and Passenger, separately; for locomotives, on basis of the total revenue locomotive miles.....	Direct.
55. Maintaining Joint Equipment at Terminals—Cr.....	Localize.....	Direct, as per current Accounting Dept. Authority.
56. Equipment Loaned—Cr.....	Credits to this account for cars must be divided on basis of total revenue car miles of home cars, Freight and Passenger, separately; for locomotives, on basis of total revenue locomotive miles.....	Direct.
TRAFFIC EXPENSES—		
57. Superintendence.....	Common to Entire Line.....	Direct.
58. Outside Agencies.....	Localize in the case of City Ticket Offices along the line; otherwise designate "Common to Entire Line".....	Direct.
59. Advertising.....	Common to Entire Line.....	Direct.
60. Traffic Associations.....	Common to Entire Line.....	Direct.
61. Fast Freight Lines.....	Common to Entire Line.....	Direct.
62. Industrial and Immigration Bureaus.....	Common to Entire Line.....	Direct.
63. Stationery and Printing.....	Common to Entire Line.....	Direct.
64. Insurance.....	Common to Entire Line.....	Direct.
65. Other Expenses.....	Common to Entire Line.....	Direct.
TRANSPORTATION EXPENSES—		
66. Superintendence.....	"Common to Entire Line"; except trainmasters or other employees, whose jurisdiction covers the entire line, but not the entire line; such items must be divided on basis of track miles in each state under the jurisdiction of such employee.....	Direct or Common.
67. Dispatching Trains.....	Localize, except when a train dispatcher's office has jurisdiction over two or more states; such items should be divided on basis of track miles in each state under the jurisdiction of such office.....	Common.
68. Station Employees.....	Localize.....	Direct or Common.
69. Weighing and Car-Service Associations.....	Expenses of weighing associations and inspection bureaus common to Entire Line. Expenses of car service associations should be localized when possible; unlocalized expenses should be divided on basis of the total track miles on June 30th, preceding, over which each car service association has jurisdiction.....	Direct.
70. Stock Yards and Grain Elevators.....	Localize.....	Direct.
71. Coal and Ore Docks.....	Localize.....	Direct.
72. Station Supplies and Expenses.....	Localize.....	Direct or Common.
73. Yard Masters and their Clerks.....	Localize.....	Direct, as per current Accounting Dept. Authority.
74. Yard Conductors and Brakemen.....	Localize.....	Direct, as per current Accounting Dept. Authority.
75. Yard Switch and Signal Tenders.....	Localize.....	Direct, as per current Accounting Dept. Authority.
76. Yard Supplies and Expenses.....	Localize.....	Direct, as per current Accounting Dept. Authority.
77. Yard Enginemen.....	Localize.....	Direct, as per current Accounting Dept. Authority.
78. Enginehouse Expenses—Yard.....	Localize.....	Direct, as per current Accounting Dept. Authority.
79. Fuel for Yard Locomotives.....	Localize.....	Direct, as per current Accounting Dept. Authority.
80. Water for Yard Locomotives.....	Localize.....	Direct, as per current Accounting Dept. Authority.
81. Lubricants for Yard Locomotives.....	Localize.....	Direct, as per current Accounting Dept. Authority.
82. Other Supplies for Yard Locomotives.....	Localize.....	Direct, as per current Accounting Dept. Authority.
83. Operating Joint Yards and Terminals—Dr.....	Localize.....	Direct.
84. Operating Joint Yards and Terminals—Cr.....	Localize.....	Common.
85. Motormen.....	For use of Electric Lines only.....	Direct.
86. Road Enginemen.....	Localize as to engine runs; when one run is in two or more states expense of the run should be divided on basis of the actual locomotive miles of run in each state.....	Common.
87. Enginehouse Expenses—Road.....	Common to Entire Line.....	Direct.
88. Fuel for Road Locomotives.....	Common to Entire Line.....	Common.
89. Water for Road Locomotives.....	Common to Entire Line.....	Common.

ACCOUNTS	BETWEEN STATE ACCOUNTING DIVISIONS	BETWEEN FREIGHT AND PASSENGER
90. Lubricants for Road Locomotives.....	Common to Entire Line.....	Common.
91. Other Supplies for Road Locomotives.....	Common to Entire Line.....	Common.
92. Operating Power Plants.....	For use of Electric Lines only.....	For use of Electric Lines only.
93. Purchased Power.....	For use of Electric Lines only.....	For use of Electric Lines only.
94. Road Trainmen.....	Localize as to train runs; when one train runs in two or more states, divide on basis of the actual train-miles of that run in each state; salary and expenses of Chief Train Auditor should be designated "Common to Entire Line"	Direct.
95. Train Supplies and Expenses.....	Common to Entire Line; except cost of detouring trains, which should be charged to the state accounting division which caused the detour.	Direct or Common.
96. Interlockers, Block and Other Signals—Operation.....	Localize.....	Common.
97. Crossing Flagmen and Gatemen.....	Localize; when operated between state lines, divide equally between the states served.	Common.
98. Drawbridge Operation.....	Localize.....	Common.
99. Clearing Wrecks.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct.
100. Telegraph and Telephone—Operation.....	For use of lines operating floating equipment.	Direct or Common.
101. Operating Floating Equipment.....	Localize when possible; otherwise divide on basis of revenue passenger train-miles.	Direct.
102. Express Service.....	Localize when possible; stationery furnished employees who have jurisdiction over two or more states, and not entire line must be divided on basis of track miles in each state under the jurisdiction of such employees; otherwise designate "Common to Entire Line"	Direct or Common.
103. Stationery and Printing.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
104. Insurance.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
105. Other Expenses.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
106. Loss and Damage—Freight.....	Localize when possible; otherwise divide on basis of track miles over which the particular shipment of freight was consigned.	Direct.
107. Loss and Damage—Baggage.....	Localize when possible; otherwise divide on basis of track miles over which the particular shipment of baggage was consigned.	Direct.
108. Damage to Property.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
109. Damage to Stock on Right of Way.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
110. Injuries to Persons.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
111. Operating Joint Tracks—Dr.....	Localize.....	Common.
112. Operating Joint Tracks—Cr.....	Localize.....	Common.
GENERAL EXPENSES—		
113. Salaries and Expenses of General Officers.....	Common to Entire Line.....	Direct or Common.
114. Salaries and Expenses of Clerks and Attendants.....	Common to Entire Line; salaries and expenses of traveling auditors should be divided on basis of the track miles under the jurisdiction of each.....	Direct or Common.
115. General Office Supplies and Expenses.....	Common to Entire Line.....	Direct or Common.
116. Law Expenses.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
117. Insurance.....	Common to Entire Line.....	Direct or Common.
118. Relief Department Expenses.....	Not used on this Line.....	Not used on this Line.
119. Pensions.....	Not used on this Line.....	Not used on this Line.
120. Stationery and Printing.....	Common to Entire Line.....	Direct or Common.
121. Other Expenses.....	Localize when possible; otherwise designate "Common to Entire Line"	Direct or Common.
122. General Administration Joint Tracks, Yards, and Terminals—Dr.....	Localize.....	Direct or Common.
123. General Administration Joint Tracks, Yards, and Terminals—Cr.....	Localize.....	Common.

(File 2646)

S. C. JOHNSON,
General Auditor.

5320

EXHIBIT NINETEEN.

5321

EXHIBIT 19.

St. Louis Southwestern Railway Company.

Statement of Ton-miles of Commercial Freight Handled on All Through and Local Trains in the State of Arkansas, Revenue Therefrom, Train Cost (Wages and Fuel), Divided Between "State" and "Inter-State," During Month of October, 1908.

Through Trains.

	State.	Interstate.	Total.
Commercial Ton Miles.....	296,723	26,850,904	27,147,627
Revenue	\$6,794.93	\$257,768.68	\$264,563.61
*Wages and Fuel.....	610.96	22,887.65	23,498.61
Avg. Cost (Wages and Fuel) per ton, per mile.....	0.002059	0.000852	0.000865

Local Trains.

	State.	Interstate.	Total.
Commercial Ton Miles.....	1,084,580	2,236,361	3,320,941
Revenue	\$24,836.88	\$21,468.06	\$46,304.94
*Wages and Fuel.....	6,963.01	5,931.46	12,894.47
Avg. Cost (Wages and Fuel) per ton, per mile.....	0.006420	0.002652	0.003883

All Trains.

	State.	Interstate.	Total.
Commercial Ton Miles.....	1,381,303	29,087,265	30,468,568
Wages and Fuel.....	\$7,573.97	\$28,819.11	\$36,393.08
Avg. Cost (wages and fuel) per ton mile.....	0.005483	0.000991	0.001194

Cost per State ton-mile greater than Interstate..... 5.5 Times.

*Divided between State and Interstate on basis of straight Revenue earned by each class of trains with no allowance for Extra Cost of handling State Freight.

NOTE.—Wages and Fuel sub-divided are as follows:

	Through trains.	Local trains.
Wages of Enginemen.....	\$5,182.29	\$2,665.60
Wages of Trainmen.....	7,744.39	4,616.81
Overtime	698.53	1,743.34
Fuel	9,873.40	3,868.72
	<u>\$23,498.61</u>	<u>\$12,894.47</u>
Per Cent of overtime to total wages.....	5%	19%

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5322

EXHIBIT TWENTY.

5323

EXHIBIT 20.

St. Louis Southwestern Railway Company.

Miscellaneous Train Statistics, State of Arkansas, Month of October, 1908.

	Through trains.	Local trains.
Train Miles	68,118—73%	25,797—27%
Wages and Fuel.....	\$23,498.61—65%	\$12,894.47—35%
Cost (Wages and Fuel) per Tr. Mi.....	\$0.34	\$0.50
Com'l Ton-Miles—LCL.....	2,069,794—80%	521,038—20%
“ —CL.....	25,077,833—90%	2,799,903—10%
“ —Total	27,147,627—89%	3,320,941—11%
Cost per Com'l Ton-Mile.....	\$0.000865	\$0.003883
Ton-Miles of Dead Wt. (Inc. Eng, Cab. Co. Frt. and all cars)—LCL.....	9,505,516—66%	4,920,301—34%
Ton-Miles of Dead Wt. (Inc. Eng, Cab. Co. Frt. and all cars)—CL.....	40,523,513—88%	5,330,326—12%
Ton-Miles of Dead Wt. (Inc. Eng, Cab. Co. Frt. and all cars)—Total	50,029,029—83%	10,250,627—17%
Company Freight (Inc. in Dead Wt.)	3,375,428—86%	535,910—14%

Ton Miles CL Com'l Frt.—State.....	275,587—22%	982,914—78%
“ “ “ —Inter-state	24,802,246—93%	1,816,989—7%
“ “ “ —Total	25,077,833—90%	2,799,903—10%
Ton Miles all Com'l Frt.—State.....	296,723—22%	1,084,580—78%
“ “ “ —Inter-state	26,850,904—92%	2,236,361—8%
“ “ “ —Total	27,147,627—89%	3,320,941—11%

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT TWENTY-ONE.

EXHIBIT 21.

St. Louis Southwestern Railway Company.

Statement of Gross Revenue for Year Ending June 30th, 1908, Showing Proportion Accruing to Arkansas and Percentage Thereof to the Total; Also Miscellaneous Statistics.

	Account.	Whole line.	State of Arkansas.	Per cent Arkansas.
1.	Freight Revenue	\$4,923,148.85	\$3,183,609.62	65
2.	Passenger Revenue	1,062,500.29	745,887.20	70
3.	Excess Baggage Revenue	11,869.78	9,011.33	76
4.	Parlor & Chair Car Rev.	3,976.30	3,976.30	100
5.	Mail Revenue	93,713.14	66,610.37	71
6.	Express Revenue	101,409.00	67,026.82	66
7.	Milk Revenue .....	.....	.....	...
8.	Other Pass. Tr.. Revenue	491.40	491.40	100
9.	Switching Revenue	27,856.00	20,140.00	72
10.	Spec. Serv. Train Revenue	4,443.61	3,135.34	71
11.	Misc. Transportation Rev.	3,403.53	1,058.75	31
12.	Station & Tr. Privileges	4,272.00	2,833.76	66
13.	Parcel Room Receipts .....	.....	.....	...
14.	Storage—Freight	3,980.41	2,951.06	74
15.	Storage—Baggage	234.68	164.59	70
16.	Car Service	14,336.69	8,598.83	60
17.	Telegraph Service .....	.....	.....	...
18.	Rents of Bldgs. & Other Property	3,671.85	2,713.15	74
19.	Miscellaneous	14,344.18	11,802.93	82
	Total	\$6,273,651.71	\$4,130,011.45	66

Miscellaneous Statistics.

Track Mileage	773	452	58
Track Mileage (excluding Ill. Div.)	635	452	71
Revenue Freight Tr. Mileage	1,472,990	1,033,954	70
Revenue Pass. Train Mileage	1,150,733	765,859	67
Revenue Mixed Tr. Mileage	31,847	21,683	68
Total Train Mileage	2,655,570	1,821,496	69
Loaded Freight Car Mileage	31,867,123	20,992,264	66
Empty Freight Car Mileage	11,718,098	7,185,854	61
Total Freight Car Mileage	43,585,221	28,178,118	65
Passenger Car Mileage	5,977,263	4,221,834	71
Locomotive Mileage—Revenue	3,071,442	2,036,498	66
Number of Tons Hauled	2,023,635	1,771,604	88
Number Tons Hauled one mile	525,928,117	346,017,718	66
Number Passengers Carried	1,455,633	1,073,664	74
No. Passengers Carried one mile	54,970,387	39,677,487	72

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT TWENTY-TWO.

5326

EXHIBIT 22.

5327

St. Louis Southwestern Railway Company.

Statement of Operating Expenses, Taxes, Rentals and Outside Operations (Def.), for Year Ending June 30th, 1908.

Accounts.		Total.	Amount chargeable to Arkansas.	Per cent Arkansas.
Maintenance of way & structures:				
1.	Superintendence	\$36,449.36	\$26,194.84	72
2.	Ballast	2,799.37	1,476.92	53
3.	Ties	161,959.04	125,318.05	77
4.	Rails	10,969.91	4,606.72	42
5.	Other Track Material	31,587.78	14,552.70	46
6.	Roadway & Track	290,831.16	194,505.32	67
7.	Removal of Snow, Sand & Ice	25.48	5.73	22
8.	Tunnels .....	.....	.....	..
9.	Bridges, Trestles & Culverts	171,633.09	157,180.58	92
10.	Over and Under Grade Crossings	685.85	106.46	16
11.	Grade Crossings, Fences, Cattle Guards and Signs	22,187.89	13,358.73	60
12.	Snow and Sand Fences & Snowsheds .....	.....	.....	..
13.	Signals & Interlocking Plants	843.42	95.15	11
14.	Telegraph & Telephone Lines	6,030.44	3,829.95	64
15.	Electric Power Transmission .....	.....	.....	..
16.	Bldgs., Fixtures & Grounds	56,654.53	44,095.23	78
17.	Docks & Wharves	2,856.30	.....	..
18.	Roadway Tools & Supplies	10,986.54	7,457.07	68
19.	Work Equipment—Repairs	4,722.10	3,152.26	67

20. Work Equipment—Renewals	5,908.44	4,135.64	70
21. Work Equipment—Depreciation	1,166.63	782.31	67
22. Injuries to Persons	1,386.63	1,003.76	72
23. Stationery & Printing	4,596.85	3,182.07	69
24. Insurance	193.33	193.33	100
25. Other Expenses			
26. Maintaining Jt. Tracks, Yds. and Other Facilities— Dr.	80,093.44	12,858.93	16
Cr.	85,548.65	8,108.32	10
27. Maintaining Jt. Tracks, Yds. and Other Facilities— Dr.			
Cr.			
Total	\$819,018.53	\$609,983.43	74
Maintenance of equipment:			
28. Superintendence	\$35,187.50	\$23,971.80	68
29. A. Steam Locomotives—Repairs—Ord.	231,060.74	153,142.13	66
29. B. Steam Locomotives—Repairs—Acc.	3,459.71	2,958.16	86
30. Steam Locomotives—Renewals			
31. Steam Locomotives—Depreciation	38,201.04	25,349.43	66
32 to 34. Electric Locomotives			
35. A. Pass. Tr. Cars—Repairs—Ordinary	69,769.33	49,046.20	70
35. B. Pass. Tr. Cars—Repairs—Accident	383.88	363.17	95
36. Passenger Tr. Cars—Renewals	Cr. 322.59	Cr. 229.04	71
37. Passenger Tr. Cars—Depreciation	16,264.57	11,419.28	70
38. A. Frt. Tr. Cars—Repairs—Ordinary	391,408.49	253,847.08	65
38. B. Frt. Tr. Cars—Repairs—Accident	16,194.58	12,453.88	77
39. Frt. Tr. Cars—Renewals	Cr. 3,629.19	Cr. 2,493.44	69
40. Frt. Tr. Cars—Depreciation	138,808.76	90,241.38	65
41 to 46. Electric & Floating Equip.			
47. Shop Machinery & Tools	22,407.51	15,365.59	69

48. Power Plant Equipment.....	.....	.....	..
49. Injuries to Persons	2,706.69	1,282.19	47
50. Stationery & Printing.....	1,852.36	1,271.65	69
51. Insurance	11,427.25	7,757.19	68
52. Other Expenses	456.94	319.53	70
53. Maint'g Jt. Equip. at Terms.—Dr.....	10,740.15	5,187.35	48
54. Equipment Borrowed—Dr.	96,315.84	64,171.91	67
55. Maint'g Jt. Equip. at Terms.—Cr.....	14,470.31	.....	..
56. Equipment Loaned—Cr.	143,972.12	Cr. 90,450.67	63
Total.....	\$924,251.13	\$624,974.77	68

5328

EXHIBIT —.

Sheet No. 2.

Accounts.		Total.	Amount chargeable to Arkansas.	Per cent Arkansas.
Traffic expenses:				
57.	Superintendence	\$57,648.99	\$39,672.54	69
58.	Outside Agencies	134,654.34	95,078.45	71
59.	Advertising	23,909.27	16,134.31	67
60.	Traffic Associations	3,309.49	2,292.97	69
61.	Fast Freight Lines .....	.....	.....	...
62.	Industrial & Immigration Bureaus	2,838.72	1,970.83	69
63.	Stationery & Printing	21,396.41	14,801.12	69
64.	Insurance	17.43	11.92	68
65.	Other Expenses .....	.....	.....	...
Total		\$243,774.65	\$169,962.14	70

Transportation expenses:

66. Superintendence	\$46,264.41	\$31,886.51	69
67. Dispatching Trains	16,894.59	9,938.68	59
68. Station Employes	228,012.90	117,059.97	51
69. Weighing & Car Serv. Ass'ns	8,130.60	5,227.90	64
70. Stock Yds. & Gr. Elevators .....	.....	.....	..
71. Coal and Ore Docks .....	.....	.....	..
72. Station Supplies & Expenses	16,129.54	9,638.56	60
73. Yardmasters & their clerks	29,015.93	11,050.20	38
74. Yard Conductors & Brakemen	61,289.68	29,238.23	48
75. Yard Switch & Signal Tenders	1,459.72	927.52	64
76. Yard Supplies and Expenses	2,023.59	871.28	43
77. Yard Enginemen	36,242.57	17,177.91	47
78. Enginehouse Expenses—Yard	14,734.57	7,560.33	51
79. Fuel for Yard Locomotives	26,457.49	11,605.73	44
80. Water for Yd. Locomotives	2,772.28	673.46	24
81. Lubricants for Yd. Locomotives	977.02	408.53	42
82. Other Supplies for Yd. Locomotives	1,175.91	447.54	38
83. Oper'g Jt. Yds. & Terms.—Dr	115,431.88	51,637.59	45
84. Oper'g Jt. Yds. & Terms.—Cr	78,311.45	4,828.54	06
85. Motormen .....	.....	.....	..
86. Road Enginemen	216,881.34	150,135.40	70
87. Enginehouse Expenses—Road	52,801.85	34,799.49	65
88. Fuel for Road Locomotives	304,606.77	200,894.22	66
89. Water for Road Locomotives	14,254.48	10,380.41	73
90. Lubricants for Road Locomotives	6,635.57	4,347.62	66
91. Other Supplies for Road Locomotives	3,263.13	2,167.03	66
92. Operating Power Plants .....	.....	.....	..
93. Purchased Power .....	.....	.....	..

94. Road Trainmen	272,915.51	191,246.89	70
95. Train Supplies & Expenses	76,333.01	52,751.80	69
96. Interlockers & Block & Other Signals—Operation...	3,596.60	1,257.38	35
97. Crossing Flagmen and Gatemen	799.92	799.92	100
98. Drawbridge Operation	5,218.29	4,948.29	95
99. Clearing Wrecks	8,451.17	6,063.02	72
100. Telegraph & Telephone—Operation	12,745.12	6,610.54	52
101. Operating Floating Equipment .....	.....	.....	...
102. Express Service	16,384.87	9,576.54	...
103. Stationery & Printing	9,000.71	6,491.45	58
104. Insurance	16,242.92	4,031.84	72
105. Other Expenses	61,078.86	45,404.86	25
106. Loss and Damage—Freight	893.21	932.19	74
107. Loss and Damage—Baggage	6,595.70	3,729.96	...
108. Damage to Property	34,680.42	26,444.86	57
109. Damage to Stock on Right-of-way	41,919.37	27,075.78	76
110. Injuries to Persons	16,647.66	176.70	65
111. Operating Joint Tracks—Dr.	11,896.69	1,790.93	01
112. Operating Joint Tracks—Cr. ....	.....	.....	15
Total	\$1,698,751.02	\$1,088,996.64	64

Account.	Total.	Amount chargeable to Arkansas.	Per cent Arkansas.
General expenses:			
113. Salaries and Expenses of Gen'l Officers.....	\$43,244.21	\$29,593.21	68
114. Sal's. & Exp's. Clerks & Attendants.....	80,128.41	54,673.41	68
115. Gen'l Office Supplies & Expenses.....	32,777.37	22,411.88	68
116. Law Expenses.....	46,576.50	28,922.06	62
117. Insurance.....	83.33	55.62	67
118. Relief Department Expenses.....	.....	.....	...
119. Pensions.....	.....	.....	...
120. Stationery & Printing.....	9,357.27	6,439.22	69
121. Other Expenses.....	3,262.25	2,266.24	69
122. Gen'l Administration Jt. Tracks, Yards and Termi- nals—Dr.	9,088.67	1,129.51	12
123. Gen'l Administration Jt. Tracks, Yards and Termi- nals—Cr.	2,185.56	1,662.27	76
Total.....	\$222,332.45	\$143,828.88	65
<i>Recapitulation.</i>			
Maintenance of Way & Structures.....	\$819,018.53	\$609,983.43	74
Maintenance of Equipment.....	924,251.13	624,974.77	68
Traffic Expenses.....	243,774.65	169,962.14	70
Transportation Expenses.....	1,698,751.02	1,088,996.64	64
General Expenses.....	322,332.45	143,828.88	65
Total Operating Expenses.....	\$3,908,127.78	\$2,637,745.86	67

Taxes	183,643.22	143,770.92	78
*Rentals	21,237.93†	92,707.34†	100
Outside Operations (Def.)	2,478.00	2,478.00	
Grand Total	\$4,073,011.07	\$2,691,287.44	66

* Analysis of Rental Credit Balance is as follows:

	Total.	Arkansas proportion.
Hire of Equipment—Cr. Balance.....	\$174,711.05	\$102,205.96
Joint Facilities—Dr. Balance.....	153,473.12	9,498.62
	<u>\$21,237.93</u>	<u>\$92,707.34</u>

[† In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

Question by Judge Hill:

I will ask you to work out the following example for me, using the Revenue Basis, as you have used it in your exhibit:

Assume that the entire revenue from Freight in the State was \$100,00.00; entire expenses in the State \$70,000.00; interstate freight revenue, \$85,000.00; state revenue \$15,000.00;

Then calculate the amount of expense chargeable to State business and the amount of expenses chargeable to Interstate business;

Then, assume that intrastate rates are increased 33½%;

Then make the same calculation showing what amount is chargeable to State business and what to interstate, assuming that the \$70,000.00 expense account would remain stationary and that the other rates would remain stationary, except the changes I have indicated.

Also, under Judge Van Devanter's Rule, assuming 100% more cost for State Freight operations.

5332-5349

Ex. 23.

Answer to Judge Hill's Example.

Item.	Per cent.	Amount on straight rev. basis.	Amount under Judge Van De Vanter's theory of 100% extra cost for State business.
State Freight Revenue.....	15	\$15,000.00	.....
Interstate Freight Rev.....	85	85,000.00	.....
	100	\$100,000.00	.....
State Freight Expenses.....	15	\$10,500.00	18,200.00— 26%
Interstate Freight Exps.....	85	59,500.00	51,800.00— 74%
	100	\$70,000.00	\$70,000.00—100%

State Freight Revenue Increased 33 1/3% with no Corresponding Increase in Interstate Revenue.

State Freight Revenue.....	19	\$20,000.00
Interstate Freight Rev.....	81	85,000.00	.....
	<u>100</u>	<u>\$105,000.00</u>	.....
State Freight Expenses.....	19	\$13,300.00	\$22,400.00— 32%
Interstate Freight Exps.....	81	56,700.00	47,600.00— 68%
	<u>100</u>	<u>\$70,000.00</u>	<u>\$70,000.00—100%</u>

Formula for Adding 100% Extra Cost.

15% x 2 =	30 =	26	difference.....	11%+
85%	85 =	74	"	11%—
<u>100%</u>	<u>115</u>	<u>100</u>		
19% x 2 =	38 =	32%	difference.....	13%+
81%	81 =	68%	"	13%—
<u>100%</u>	<u>119</u>	<u>100%</u>		

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

St. Louis, Iron Mountain & Southern Railway Company

Statement of Trans-State, Interstate and State Freight Handled During the Month of October, 1907.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Character of freight.	Number of tons.	Percentage of total tons.	Revenue.	Percentage of total revenue.	Average amount received per ton.	Number of tons one mile.	Percentage of total ton miles.	Average amount received per ton per mile (miles).	Average length of haul (miles).
Trans-State:									
1. Carload	207,767	32.29	\$300,220.53	33.74	\$1.4450	59,194,477	49.12	5.072	284.91
2. Less-than-carload	8,482	1.32	57,311.06	6.44	6.7508	2,400,496	2.04	23.292	290.08
3. Total Trans-State	216,249	33.61	\$357,531.59	40.18	\$1.6533	61,654,973	51.16	5.799	285.11
Interstate:									
4. Carload	270,537	42.04	\$331,477.91	37.25	\$1.2253	46,789,104	38.82	7.085	172.95
5. Less-than-carload	20,573	3.20	74,879.19	8.41	3.6397	2,253,381	1.87	33.230	109.53
6. Total Interstate	291,110	45.24	\$406,357.10	45.66	\$1.3959	49,042,485	40.69	8.286	168.47
Intra-State:									
7. Carload	128,014	19.90	\$95,107.34	10.69	\$0.7429	9,364,798	7.77	10.156	73.15
8. Less-than-carload	8,031	1.25	30,893.15	3.47	3.8467	459,204	0.38	67.275	57.18
9. Total Intra-State	136,045	21.15	\$126,000.49	14.16	\$0.9202	9,824,002	8.15	12.826	72.21
10. Grand total	643,404	100.00	\$889,880.18	100.00	\$1.3831	120,521,460	100.00	7.384	187.31
Total Intrastate (lines 1 to 6) :									
11. Carload	478,304	74.33	\$631,698.44	70.99	\$1.3207	105,983,581	87.94	5.960	221.58
12. Less-than-carload	29,055	4.52	132,190.25	14.85	4.5497	4,713,877	3.91	28.043	162.24
13. Total	507,359	78.85	\$763,888.69	85.84	\$1.5056	110,697,458	91.85	6.901	218.18
14. All Carload—Total	606,318	94.23	\$736,805.78	81.68	\$1.1987	115,348,379	95.71	6.301	190.24
15. All Less-than-carload—Total ..	37,086	5.77	\$163,083.40	18.32	\$4.3974	5,173,081	4.29	31.527	139.48

Endorsed: Filed June 8th, 1910. W. P. Feld, Clerk. By W. Presley Feld, D. C.

The Missouri Pacific Railway.

Average Daily Rates of Pay for Classes of Service Given for Years Shown.

Average Rate of Pay per 100 Miles in Freight Service, and per Day Passenger and Switching Service, as per Schedules.

(Includes Passenger, Through and Local Freight, and Switch Service.)

	1897.	1902.	1903.	1905.	1906.	1907.	1909.	Per cent of increase.
Engineers	3.43	3.95	4.16	4.20	4.20	4.55	4.55	32.6
Firemen	2.22	2.40	2.64	2.64	2.70	2.92	2.92	31.5
Conductors	3.27	3.53	3.96	3.96	3.96	4.31	4.31	31.8
Brakemen	1.96	2.04	2.27	2.27	2.27	2.50	2.50	27.5
Switchmen	2.10	3.00	3.00	3.00	3.00	3.40	3.40	61.9
Telegraphers .....	....	....	....	....	1.93	2.13	2.18	13.0
				Average rates.				
			1900.	1902.	1903.	1907.	1909.	Per cent of increase.
*Blacksmiths			2.73	2.85	3.10	3.38	3.38	23.9
*Boilermakers			2.93	3.20	3.40	3.70	3.70	26.3
*Machinists			2.93	3.20	3.40	3.70	3.70	26.3
*Tinner and Pipe Fitters			2.59	2.70	2.90	3.19	3.19	23.2
*Car Men			2.27	2.30	2.30	2.57	2.57	13.2

*Figures for 1896 not available.

Endorsed.

Increase Granted Train Porters and Rates of Pay Since 1892.

	1892.	Rate April 1st, 1907.	Per cent of increase.
Train Porters	\$40.00	\$45.00	12.5
Chair Car Porters.....	35.00	40.00	14.0

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5354

EXHIBIT TWENTY-EIGHT.

5355

EXHIBIT No. 28.

St. Louis, Iron Mountain & Southern Railway Company.

Average Price Paid for Various Commodities in Year 1909, Compared with Year 1898, and Per Cent of Increase.

Item.	1898.	1909.	Increase per cent.
Angle Bars	\$1.02½ cwt.	\$1.75 cwt.	71.5
Track Bolts	1.60 "	2.50 "	56.2
Track Spikes	1.60 "	2.05 "	28.1
Lime .....	.40 Bbl.	.75 Bbl.	87.5
Cast Iron Pipe.....	14.60 per ton.	28.50 per ton.	95.2
Nails—Cut	1.33 cwt.	2.20 cwt.	65.4
Barb wire	1.80 "	2.05 "	13.9
Bridge Stringers	20.00 per M.	28.00 M.	40.0
Piling .....	.10 ft.	.15½ ft.	55.0
Bridge timbers (Miscellaneous).....	16.00 " M.	19.50 M.	22.0
Dimension lumber	12.50 "	17.00 "	36.0

Bar Iron	1.10	cwt.	2.00	cwt.	81.8
Malleable Journal Boxes.....	1.60	each.	2.86	each.	78.7
White Lead	5.14	cwt.	7.00	cwt.	36.1
Freight car decking.....	13.00	per M.	14.00	M.	7.7
Tank Steel	1.00	cwt.	1.96	cwt.	96.0
Car axles	1.65	"	2.05	"	24.2
Malleable Iron	2.40	"	3.50	"	45.8
Waste	3.50	"	5.50	"	57.0
Chain	1.90	"	4.50	"	136.8
Forgings	1.95	"	3.25	"	66.6
Gray iron castings.....	1.375	"	1.80	"	30.9
Brass tubing .....	.16	ft.	.21 ³ / ₄	ft.	35.9
Brass sheets .....	.135	lb.	.265	lb.	96.3
Journal bearings .....	.11	"	.16	"	45.4
Brass castings .....	.125	"	.18	"	44.4
Track switches	29.40	each.	39.50	each.	34.3
Track frogs	30.25	each.	37.75	each.	24.8
Boiler Tubes .....	.065	ft.	.16	ft.	147.7

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5357-5359

EXHIBIT No. 29.

St. Louis, Iron Mountain & Southern Railway Company.

Average Yearly Actual and Relative Prices of Commodities—Report Bureau of Commerce and Labor, Bulletin 75, March, 1908.

	1907.	1897.	Increase per cent 1907 compared with 1897.
Coke, Ton	\$2.8250	\$1.6167	74.7
Oil Crude, Barrel	1.7342	.9118	90.2
“ Refined, Gallon .....	.0824	.0597	38.0
Augers, 3/4" each.....	.3600	.1425	152.6
Axes .....	.6800	.3938	72.7
Bar Iron (Mill) Pound.....	.0175	.0110	59.1
Barb Wire (Galvanized) pound.....	2.6342	1.8000	46.3
Chisels, 1" each.....	.4438	.1710	159.5
Copper, Ingot, pound.....	.2125	.1132	87.7
“ Sheet “ .....	.2792	.1400	99.4
“ Wire “ .....	.2402	.1375	74.7
Door Knobs Bronze, pair.....	.4500	.1660	171.1
Lead Pipe, 100 pounds.....	6.7050	4.3167	32.2
Locks, common, mortise, each.....	.2000	.0833	140.1
Nails, 8 penny, per 100 lbs.....	2.1625	1.3329	62.2
“ wire 8 penny, per 100 lbs.....	2.1167	1.4854	42.5
Pig iron, Bessemer, per ton.....	22.8417	10.1258	125.6
“ “ Gray forge “	20.9875	8.8021	138.4

Steel Billets, ton.....	29.2530	15.0800	94.0
Steel Sheets, black pound.....	.0250	.0195	28.2
Tin Plate, per 100 lbs.....	4.0900	3.1823	28.5
Vises, solid box, each.....	5.7500	3.5000	64.3
Wood Screws, gross 1".....	.1219	.0850	43.4
Zinc Sheet, per 100 lbs.....	7.4858	4.9400	51.5
Lime, barrel.....	.9492	.7188	32.1
Linseed oil, gallon.....	.4342	.3275	32.6
Plate Glass, 3'-5' sq. foot.....	.2300	.2000	15.0
Resin, Barrel.....	4.3771	1.6125	171.4
Tar.....	2.3292	1.0542	120.9
Rope, Manila 3/8, pound.....	.1290	.0631	104.4

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows pasteur, marked pp. 5360 and 5361.)

5360

5361

EXHIBIT THIRTY-ONE.

EXHIBIT No. 31.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Comparison of Averages Based upon Statistics Published by the Interstate Commerce Commission
Revenue and Expenses of Steam Roads in the United States for Six Months Ending December
Based upon the Operation of the St. Louis, Iron Mountain & Southern Railway for the Same

	United States.	Alabama Great Southern.	Atchison, Topeka and Santa Fe.	Atlantic Coast Line.	Central of Georgia.	Illinois Central.	Rock Island-Frisco.
Miles Operated (average).....	226,458.12	1,177.99	9,558.58	11,061.11	2,118.58	5,843.59	14,378.24
Operating Revenues:							
Freight	\$945,671,423.37	\$6,836,367.28	\$33,765,453.41	\$32,625,142.42	\$4,342,415.90	\$23,335,800.93	\$40,183,653.48
% of Total Revenue.....	69.09	70.30	68.76	69.85	65.97	67.82	67.32
Passenger	319,936,828.32	2,296,320.96	11,539,740.23	11,266,283.23	1,713,581.34	7,244,039.38	15,809,662.25
% of Total Revenue.....	23.37	23.61	23.50	24.12	26.03	21.05	26.41
Other Transportation	90,005,252.06	493,572.88	3,407,606.43	2,437,225.31	371,223.10	3,551,548.03	3,415,240.75
% of Total Revenue.....	6.58	5.08	6.94	5.22	5.64	10.32	5.11
Non Transportation	13,131,368.30	98,193.15	390,395.03	377,124.05	155,165.04	277,892.23	365,352.72
% of Total Revenue.....	0.96	1.01	0.80	0.81	2.36	0.81	0.61
Unclassified	66,311.10						
% of Total Revenue.....							
Total.....	1,368,811,183.15	9,724,454.27	49,103,195.10	46,705,775.01	6,582,385.38	34,409,280.57	59,773,909.22
Operating Expenses:	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Maintenance of Way & Structures.....	186,610,831.90	1,192,637.95	8,463,762.81	6,742,363.52	884,875.24	5,098,638.47	8,505,857.39
% of Total Expenses.....	0.05	15.79	24.55	19.14	18.35	19.92	19.06
Maintenance of Equipment.....	215,792,707.71	2,370,040.02	8,572,572.85	8,930,358.35	1,194,467.70	6,851,902.72	8,674,771.32
% of Total Expenses.....	23.19	31.37	24.86	25.35	24.77	26.77	20.25
Traffic	25,163,637.58	225,775.88	902,002.85	1,044,151.00	157,677.40	706,647.54	1,360,776.31
% of Total Expenses.....	2.70	2.99	2.61	2.96	3.27	2.76	3.19
Transportation	471,536,215.87	3,501,352.31	15,505,063.27	17,324,695.08	2,333,560.02	12,173,674.99	22,385,492.35
% of Total Expenses.....	50.67	46.34	44.97	49.17	48.39	47.56	52.32
General Expenses	31,337,125.03	265,557.70	1,036,846.34	1,190,830.23	251,685.92	765,517.49	1,693,668.21
% of Total Expenses.....	3.37	3.51	3.01	3.38	5.22	2.99	3.08
Unclassified	139,142.94						
% of Total Expenses.....	0.02						
Total.....	950,579,661.03	7,555,363.86	34,480,248.12	35,232,398.18	4,822,266.26	25,596,381.21	42,620,565.33
Taxes	100.00	100.00	100.00	100.00	100.00	100.00	100.00
% of Taxes to Gross Revenue.....	41,380,438.36	263,169.06	1,468,437.53	1,403,415.36	221,919.63	1,383,859.29	1,522,725.09
	3.02	2.71	2.99	3.00	3.37	4.02	2.35
Percentage of Earnings:							
Freight	69.09	70.30	68.76	69.85	65.97	67.82	67.32
Passenger	23.37	23.61	23.50	24.12	26.03	21.05	26.41
Other	7.54	6.09	7.74	6.03	8.00	11.13	6.22
Total.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Percentage of Expenses to Earnings.....	67.98	77.69	70.22	75.43	73.26	74.39	71.29
Gross Revenue per Mile of Line.....	6,044.00	8,255.00	5,137.08	4,222.52	3,106.98	5,888.38	4,157.25
Gross Expenses " " " "	4,109.00	6,414.00	3,607.26	3,185.25	2,276.18	4,380.25	2,964.24

NOTE.—Other Transportation includes Revenue Accounts 3 to 11; Non Transportation includes Revenue Accounts 12 to 19; Operating Expenses do not include

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

Company.

See Commission's Bulletin No. 1, Showing
 for December 31, 1907, with Similar Averages
 for the Same Period.

Rock Island- Frisco.	St. Louis Southwestern.	Seaboard Air Line.	Southern.	Kansas City Southern.	Mo. Pac. System, all lines.	St. L., I. M. & S. Ry. in Arkansas.
14,378.24	1,569.21	2,986.51	9,351.44	859.37	7,129.45	1,353.02
\$40,183,653.68	\$4,134,679.61	\$5,762,959.60	\$24,422,429.80	\$3,845,354.37	\$18,568,759.08	\$4,773,458.50
67.23	74.58	66.70	65.75	76.91	71.21	71.51
15,809,662.22	1,122,624.46	2,181,960.89	9,566,000.60	752,281.12	5,190,087.70	1,405,018.41
26.45	20.25	25.25	25.76	15.05	19.90	21.05
3,415,240.67	241,116.14	470,531.08	2,928,127.78	341,846.54	1,839,254.03	379,538.98
5.71	4.35	5.45	7.88	6.84	7.02	5.69
365,352.78	45,623.45	224,329.31	226,281.24	59,911.12	487,190.49	117,060.90
.61	.82	2.00	.61	1.20	1.87	1.75
.....
.....
59,773,909.35	5,544,043.66	8,639,780.88	37,142,839.42	4,999,393.15	26,076,291.30	6,675,076.79
100.00	100.00	100.00	100.00	100.00	100.00	100.00
8,505,857.33	931,969.92	1,241,225.05	5,260,380.11	525,953.46	4,194,363.35	1,054,676.51
19.96	23.24	18.64	18.96	16.15	21.74	22.19
8,674,771.33	924,823.14	1,272,396.23	6,719,616.17	763,306.62	4,163,050.48	1,035,566.07
20.35	23.06	19.10	24.23	23.44	21.58	21.79
1,300,776.31	177,862.86	272,324.29	877,475.48	139,397.10	606,816.05	142,010.50
3.19	4.44	4.09	3.16	4.28	3.14	2.99
22,385,492.35	1,760,896.84	3,566,792.17	13,617,515.92	1,677,358.91	9,521,320.16	2,226,644.87
52.52	43.92	53.56	49.09	51.52	49.35	46.86
1,693,608.21	214,020.75	306,854.27	1,263,366.68	149,919.24	807,948.80	202,985.43
3.98	5.34	4.61	4.56	4.61	4.19	6.17
.....
.....
42,620,565.53	4,009,573.51	6,659,592.01	27,738,354.36	3,255,935.33	19,293,498.84	4,751,883.38
100.00	100.00	100.00	100.00	100.00	100.00	100.00
1,522,725.49	146,322.03	322,600.00	1,244,327.53	108,452.70	836,192.94	222,148.18
2.55	2.64	3.73	3.35	2.17	3.21	3.33
67.23	74.58	66.70	65.75	76.91	71.21	71.51
26.45	20.25	25.25	25.76	15.05	19.90	21.05
6.32	5.17	8.05	8.49	8.04	8.89	7.44
100.00	100.00	100.00	100.00	100.00	100.00	100.00
71.30	72.32	77.08	74.68	65.13	73.99	71.19
4,157.25	3,533.02	2,892.94	3,971.88	5,817.50	3,657.55	4,933.46
2,964.24	2,555.15	2,229.89	2,966.21	3,788.74	2,706.17	3,512.06

do not include Hire of Equipment nor outside operation.

5362

EXHIBIT THIRTY-TWO.

5363

EXHIBIT 32.

St. Louis Southwestern Railway Company.

State of Arkansas.

*Statement of Operating Revenues, Operating Expenses, Taxes and Outside Operations (Def.) for Six Months
Ending December 31, 1907.*

Operating Revenues.

Item.	Freight.	Passenger.	Total.	Per cent.
Freight Revenue—State	\$173,064.45	\$.....	\$173,064.45	7.56
Freight Revenue—Interstate	1,597,230.02	.....	1,597,230.02	69.80
Pass. Revenue—State .....	.....	246,101.33	246,101.33	10.76
Pass. Revenue—Interstate .....	.....	170,735.14	170,735.14	7.46
Miscellaneous:				
Excess Baggage Revenue .....	.....	4,206.42	.....	.....
Parlor and Chair Car Revenue .....	.....	2,096.05	.....	.....
Mail Revenue .....	.....	33,218.77	.....	.....
Express Revenue .....	.....	34,155.57	.....	.....
Other Pass. Tr. Revenue .....	.....	290.56	.....	.....
Switching Revenue	11,743.00	.....	.....	.....
Spec. Serv. Tr. Revenue	3,066.73	.....	.....	.....
Misc. Transp. Revenue	1,375.90	.....	.....	.....
Station & Train Privileges .....	.....	1,431.12	.....	.....

Storage—Freight	1,495.05	.....	.....
Storage—Baggage .....	.....	.....	.....
Car Service	5,275.83	.....	.....
Rents of Bldgs. & Other Prop'ty.....	515.85	.....	.....
Miscellaneous	1,538.66	.....	.....
Total.....	\$1,795,355.49	\$492,817.91	\$2,288,173.40

Operating Expenses, Taxes, Rentals, and Outside Operations (Def.).

Item.	Freight.	Passenger.	Total.	Per cent.
Maint. of Way & Structures.....	\$174,232.35	\$126,992.95	\$301,225.30	22.01
Maintenance of Equipment.....	260,243.81	90,097.04	350,340.85	25.59
Traffic Expenses	59,812.88	25,999.54	85,812.42	6.27
Transportation Expenses	387,821.21	176,500.45	564,321.66	41.23
General Expenses	44,017.99	23,119.48	67,137.47	4.90
Taxes	\$926,128.24	\$442,709.46	\$1,368,837.70	100.00
Rentals	56,188.77	15,848.11	72,036.88	
Outside Operations	*56,722.81	2,549.88	*54,172.93	
Total.....	\$925,594.20	\$462,481.74	\$1,388,075.94	

* Red ink figures denote credit.

NOTE.—The State Freight and Passenger rates inhibited by the injunction granted at St. Paul, in September, 1908, were in effect during this entire year.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

5364
5365

EXHIBIT THIRTY-THREE.

EXHIBIT 33.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of Operating Revenues, Operating Expenses, Taxes, Rentals and Outside Operations (Def.), Showing Results from Handling State Freight and Passenger Traffic (After Excluding Revenue, Expenses, Taxes, Rentals and Outside Operations (Def.) for Interstate Freight and Passenger Traffic and All of Mail, Express and Miscellaneous), for Six Months Ending December 31, 1907.

Expenses, Taxes, Rentals and Outside Operations (Def.) Divided Between the Different Classes of Traffic and Between State and Interstate on a Revenue Basis.

Freight.

Item.	Operating revenues.	Per cent.	Operating expenses, taxes, rentals & outside operations (def.).
Freight—State	\$173,064.45	9.64	\$89,227.28
Freight—Interstate	1,597,230.02	88.96	823,408.60
Miscellaneous	25,061.02	1.40	12,958.32
Total Freight	\$1,795,355.49	100.00	\$925,594.20

Passenger.

Passenger—State	\$246,101.33	49.94	\$230,963.38
Passenger—Interstate	170,735.14	34.64	160,203.68
Mail, Express & Misc.....	75,981.44	15.42	71,314.68
Total Passenger	\$492,817.91	100.00	\$462,481.74
Grand Total	\$2,288,173.40	.....	\$1,388,075.94

Summary, State Traffic Only.

	Freight.	Passenger.	Total.
State Revenue	\$173,064.45	\$246,101.33	\$419,165.78
State Expenses, Taxes, Rentals and Outside Operations (Def.) on a revenue basis, with no allowance for extra cost	89,227.28	230,963.38	320,190.66
Balance	\$83,837.17	\$15,137.95	\$98,975.12
Extra cost:			
* Frt. 50%—Pass. 25%	38,444.14	19,733.18	58,177.32
Balance	\$45,393.03	\$4,595.23†	\$40,797.80
† Frt. 100%—Pass. 15%	73,418.26	12,468.97	85,887.23
Balance	\$10,418.91	\$2,668.98	\$13,087.89

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Vandeventer in granting temporary injunction.

[† In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild. D. C.

EXHIBIT THIRTY-FOUR.

EXHIBIT 34.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement Showing How Extra Cost of Handling State Traffic, in Proportion to Revenue, is Arrived at for Six Months Ending December 31, 1907. (Extra Cost Applied to Operating Expenses Only; Not to Taxes, Rentals, etc.)

	Freight.	Passenger.	Difference.
Total Operating Expenses (excluding Taxes, Rentals and Outside Operations (Def.).....	\$926,128.24	\$442,709.46	
Less Mail, Express and Miscellaneous prop'n Frt. 1.40%—			
Pass. 15.42%	12,965.79	68,265.80	
Total Operating expenses only, chargeable to Freight and Passenger Traffic	\$913,162.45	\$374,443.66	
* Freight at 50%.			
State Freight Rev.....	\$173,064.45 —	9.78 x 1½ = 14.67 =	13.99
Interstate Frt. Rev.....	1,597,230.02 —	90.22	86.01
	\$1,770,294.47 —	104.89	100.00

The Extra Cost is 4.21% of \$913,162.45 or \$38,444.14.

† Freight @ 100%.

State Freight Rev.....	\$173,064.45 —	9.78 x 2 =	19.56 =	17.82	8.04+
Interstate Frt. Rev.....	1,597,230.02 —	90.22	90.22	82.18	8.04—
	<u>\$1,770,294.47 —</u>	100.00	109.78	100.00	

The Extra Cost is 8.04% of \$913,162.45 or \$73,418.26.

* Passenger @ 25%.

State Pass. Rev.....	\$246,101.33 —	59.04x1.25 =	73.80 =	64.31	5.27+
Interstate Pass. Rev.....	170,735.14 —	40.96	40.96	35.69	5.27—
	<u>\$416,836.47 —</u>	100.00	114.76	100.00	

The Extra Cost is 5.27% of \$374,443.66 or \$19,733.18.

† Passenger @ 15%.

State Pass. Rev.....	\$246,101.33 —	59.04x1.15 =	67.90 =	62.37	3.33+
Interstate Pass. Rev.....	170,735.14 —	40.96	40.96	37.63	3.33—
	<u>\$416,836.47 —</u>	100.00	108.86	100.00	

The Extra Cost is 3.33% of \$374,443.66 or \$12,468.97.

* Minimum ratio of Extra Cost found in the Missouri Case.

† Minimum ratio of Extra Cost found by Judge Van deventer in granting temporary injunction.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT THIRTY-FIVE.

EXHIBIT 35.

St. Louis Southwestern Railway Company.

State of Arkansas.

Miscellaneous Traffic Statistics for Six Months Ending December 31, 1907.

Miles Operated in Arkansas.....			452.2 Miles.
Freight:			
	State.	Interstate.	Total.
Tons carried	197,600	797,865	995,465
Tons carried one mile	8,512,807	184,831,455	193,344,262
Tons carried one mile per mile of road	18,825	408,738	427,563
Avg. distance haul per ton—in miles	43	232	194
Percentage of total tons	19.9	80.1	100.0
Percentage of total tons one mile	4.4	95.6	100.0
Percentage of freight revenue	9.8	90.2	100.0
Passenger:			
Passengers carried	504,392	82,064	586,456
Passengers carried one mile	12,345,719	9,930,034	22,275,753
Passengers carried one mile per mile of road	27,301	21,959	49,260
Avg. distance haul per pass. in miles	24	121	38
Percentage of total passengers	86.0	14.0	100.0
Percentage of passengers one mile	55.4	44.6	100.0
Percentage of passenger revenue	59.0	41.0	100.0

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5370

EXHIBIT THIRTY-SIX.

5371

Document No. 750.

Pacific Express Company and The Missouri Pacific Railway Company.

Contract Providing Facilities for the Transportation of Express Matter Over Lines of the Railway Company.

Dated May 1st, 1886; Expires May 1st, 1896.

General Auditor's Contract No. 503.

This Agreement, Entered into this first day of May, A. D. eighteen hundred and eighty-six, between The Missouri Pacific Railway Company, a corporation organized under the laws of the State of Missouri, for themselves and for all lines owned, operated or controlled by them, party of the first part, and the Pacific Express Company, a corporation organized under the laws of the State of Nebraska, party of the second part; witnesseth:

5372 That Whereas, the party of the first part now owns and is engaged in operating lines of railroad extending from St. Louis, Mo., to Texarkana and to Omaha, Nebraska, and diverging lines;

And Whereas, the party of the second part is an Express Company having a large and established business between the principal commercial cities of the east and various places upon the lines of said railroad, and points beyond such lines of railroad;

And Whereas, the party of the second part is desirous of securing for the benefit of itself and the persons employing it, permanent and reliable facilities for the transportation of its express matter, and the party of the first part is desirous of securing the business and patronage of the party of the second part;

It is agreed as follows:

First. The party of the first part agrees to provide, on each of its daily passenger trains, sufficient facilities of the kind customarily furnished to express companies by railroad companies for the transportation of all freight and express matters which may be tendered to them by the party of the second part for transportation upon any of their daily passenger trains, at any station at which such trains may stop, and to receive and transport such freight and express matter upon the said passenger trains leaving such station next after said tender, and carry and deliver the same without delay. But the carriage of more than one carload of express matter by any one passenger train, shall for convenience, be at the option of the party of the first part.

Second. The party of the second part shall be entitled to send free both ways, all its messengers' safes and empty packing trunks,
5373 and shall also have the privilege to send free of charge one person, with each car, as messenger, to take charge of its

property, and the property confided to it for carriage, and when necessary an additional messenger, armed as guard, for protection against highway robbers. Such messengers shall ride in the car provided by the party of the first part for the carriage of the goods in their charge. The agents of the party of the second part shall be carried free of charge on the passenger trains of the party of the first part, whenever such agents are traveling on the business of the party of the second part.

In case the cars for the transportation of express matter are furnished by the party of the second part, the said second party shall be entitled to receive from the party of the first part, such compensation for said cars, as is the customary mileage paid by said first party to connecting railways for similar cars.

Third. The party of the first part agrees to employ the party of the second part, exclusively, to receive, take charge of and deliver all money, remittances, packages and parcels which they may require to have sent or delivered on the line of its railway, by express, such service to be compensated as hereinafter provided.

Fourth. Settlements shall be made monthly, and the party of the first part shall be entitled to receive fifty (50) per cent of the total gross earnings of the party of the second part on the lines of the said first party's railroad.

Fifth. The party of the second part shall at all times be entitled to have its necessary equipment material transported free on freight trains, as compensation for receiving, caring for, and delivering the money, remittances, packages and parcels of the party of the first part, and shall not make any other charge for such services.

5374 Sixth. The party of the second part shall have the right to employ the agents and servants of the party of the first part as its own agents when such employment will, in the opinion of the parties of the first part not be to the interruption or detriment of their business. It is understood that in the case of such employment, the party is the exclusive employé of the party of the first part, as to any shipment to be made on account of said first party, until it is delivered to an exclusive employé of the party of the second part.

Seventh. This contract is to supersede and cancel and is a settlement in full for all existing contracts between the parties hereto, and shall be binding for ten (10) years from the first day of May, 1886, and shall apply to all lines of railroad now owned, operated or controlled by the party of the first party and also to such as may be owned, operated or controlled by them during the period of this contract.

The said second party in consideration of this contract, and the rights and privileges accorded by it, agrees to give to the said party of the first part \$2,400,000.00 of its capital stock (and it is agreed that the capital stock of the second party shall not be increased above \$6,000,000.00 without the consent of the first party).

Eighth. The party of the first part also agrees not to engage during the last named period in the Express business, nor to employ any other Express Company or individual in the carriage of its money,

remittances, packages, parcels or goods by express, and that they will not permit any of their employes, to receive, carry or deliver express matter except as hereinbefore provided. They also agree that they will not during such period give to any other person, firm, company or corporation any better or more advantageous terms, rates or facilities than they give to the party of the second part, and 5375 they will so far as they lawfully may, during all such period, protect and forward the interest and business of the party of the second part.

Ninth. The party of the first part in consideration of the payments received and hereafter to be received, and the benefits to be derived from this agreement, hereby appoints and constitutes the said party of the second part its sole agent to manage and carry on the express business of its lines of railway, and should any portion of said Railway be occupied by any other express company or firm, then such payments as may be received from such other express company or firm shall be considered gross earnings of said party of the second part, and treated as such.

THE MISSOURI PACIFIC RAILWAY
COMPANY,

[SEAL.]

By JAY GOULD, *President*.

Attest:

GUY PHILLIPS,

Second Assistant Secretary.

THE PACIFIC EXPRESS COMPANY,

[SEAL.]

By E. M. MORSMAN, *President*.

Attest:

WM. F. BECHEL, *Secretary*.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows paster, marked pp. 5376 and 5377.)

5376

5377

EXHIBIT THIRTY-SEVEN.

Intrastate Mileage Rates in Effect in 1907 in States Mentioned on Commodities as Listed

	Mileage. Arkansas				Mileage. Kansas				Mileage. Louisiana				25
	25	50	75	100	25	50	75	100	25	50	75	100	
Bricks—Common	2	2	3	3.50	3.75	5	5.75	6.25	4	5	5	6	3.25
Coal:													
Lump	2.50	2.50	3.75	4.75	3.	4.25	5.25	6.00	4.50	5	5.75	6.50	*2.50
Slack	2.25	2.25	3.00	3.50	3.	4.25	4.2	4.8	4.50	5	5.75	6.50	2.50
Cement	6.00	7.00	8.00	9.00	6.00	7.00	8.00	10.00	†11.50	16.5	19.50	22.50	4.50
Cordwood	2.00	2.00	2.50	3.00	†4.50	5.50	7.00	7.50	4.00	5.0	5.00	6.00	3.00
Emigrant Outfit	6.00	8.00	10.00	12.00	†9.00	11.00	14.00	16.00	\$20.00	\$25.	\$30.	\$30.	11.00
Grain:													
Corn	4.00	5.00	7.00	8.00	4.50	5.50	6.50	7.00	.....	.....	.....	.....	5.00
Oats	4.00	5.00	7.00	8.00	4.50	5.50	6.50	7.00	.....	.....	.....	.....	5.00
Rye	4.00	5.00	7.00	8.00	4.50	5.50	6.50	7.00	.....	.....	.....	.....	5.00
Barley	4.00	5.00	7.00	8.00	4.50	5.50	6.50	7.00	.....	.....	.....	.....	5.00
Wheat	6.00	8.00	10.00	11.00	5.00	7.00	7.00	9.00	.....	.....	.....	.....	6.00
Hay	4.00	5.00	6.00	7.00	6.00	7.00	8.00	10.00	5.50	8.00	9.50	10.50	†8.50
Ice	4.00	4.50	5.00	5.50	4.00	5.50	6.50	7.00	4.50	5.00	6.00	6.50	†5.00
Lime	4.00	5.00	6.00	6.50	6.00	7.00	8.00	10.00	†11.50	16.50	19.50	22.50	4.50
Lumber	3.00	4.00	4.50	5.00	6.50	8.00	11.00	13.00	6.00	7.00	7.00	8.00	4.00
Plaster	6.00	7.00	8.00	9.00	6.50	7.00	8.00	10.00	†11.50	16.50	19.50	22.50	4.50
Salt	5.00	6.00	7.00	7.50	7½	11.00	13.00	15½	.....	.....	.....	.....	4.50
Sand	2.00	2.00	2.50	3.00	3.50	4.50	5.25	5.75	4.00	5.00	5.00	6.00	3.25
Stone	2.00	2.00	2.50	3.00	3.50	4.50	5.25	5.75	4.00	5.00	5.00	6.00	3.25
Gravel	2.00	2.00	2.50	3.00	†4.50	5.50	7.00	7.50	4.00	5.00	5.00	6.00	3.25
Fertilizer	4.00	5.00	6.00	6.50	†4.50	5.50	7.00	7.50	†9.00	12.00	14.00	16.75	†5.00

Interstate Rates Between—

	Arkansas and Louisiana.				Arkansas and Missouri.				Ark
	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	
Coal:									
Brick—Common	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	3.75
Lump .....	.....	.....	.....	.....	.....	.....	.....	.....	6.50
Slack .....	.....	.....	.....	.....	.....	.....	.....	.....	6.50
Cement	†11.50	16.50	19.50	22.50	†10.50	15.50	19.00	22.00	†8.50
Cordwood	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	†6.50
Emigrant Outfit	†11.50	16.50	19.50	22.50	†10.50	15.50	19.00	22.00	†11.00
Grain:									
Corn .....	.....	.....	.....	.....	.....	.....	.....	.....	7.00
Oats .....	.....	.....	.....	.....	.....	.....	.....	.....	7.00
Rye .....	.....	.....	.....	.....	.....	.....	.....	.....	7.00
Barley .....	.....	.....	.....	.....	.....	.....	.....	.....	7.00
Wheat .....	.....	.....	.....	.....	.....	.....	.....	.....	8.00
Hay .....	.....	.....	.....	.....	.....	.....	.....	.....	6.50
Ice	5.00	5.00	6.50	8.00	†9.00	11.00	14.00	16.00	4.00
Lime	†11.50	16.50	19.50	22.50	†10.50	15.50	19.00	22.00	8.50
Lumber	6.00	7.00	7.00	8.00	5.00	6.50	7.50	8.50	7.00
Plaster	†11.50	16.50	19.50	22.50	†10.50	15.50	19.00	22.00	8.50
Salt	†11.50	16.50	19.50	22.50	†10.50	15.50	19.00	22.00	8.50
Sand	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	3.75
Stone	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	3.75
Gravel	4.00	5.00	5.00	6.00	†9.00	11.00	14.00	16.00	3.75
Fertilizer	†9.00	12.00	14.00	16.75	†9.00	11.00	14.00	16.00	†6.50

* Soft Coal.

† Class Rates.

Rates shown on Cordwood Intrastate in Oklahoma and Texas are dollars per cord; in all other instances cents per 100 pounds, except Emigrant Outfit Intrastate rates.

Endorsed: Filed Jun. 8, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

tioned on Commodities as Listed.

ge. Louisiana.			Mileage. Missouri.				Mileage. Oklahoma.				Mileage. Texas.			
0	75	100	25	50	75	100	25	50	75	100	25	50	75	100
	5	6	3.25	3.75	4.50	5	3.75	5	5.50	6.25	2.25	3	3.50	4
	5.75	6.50	*2.50	3.50	4.25	5	*4.25	5.75	7.00	7.50	2.75	3.25	4.00	4.50
	5.75	6.50	2.50	3.50	4.25	5	4.25	5.75	7.00	7.50	2.00	2.50	3.75	3.75
.5	19.50	22.50	4.50	6.00	7.50	8.50	6.00	7.00	8.00	10.00	6.50	7.50	9.50	11.00
.0	5.00	6.00	3.00	3.75	4.50	5.00	\$1.25	\$1.40	\$1.40	\$1.65	\$.70	\$.80	\$1.10	\$1.25
	\$30.	\$30.	11.00	13.00	16.00	18.00	†9.00	11.00	14.00	16.00	†7.00	8.00	11.00	13.00
...	...	...	5.00	6.50	8.00	8.50	5.00	6.50	7.50	8.50	5.00	6.00	7.50	8.50
...	...	...	5.00	6.50	8.00	8.50	5.00	6.50	7.50	8.50	5.00	6.00	7.50	8.50
...	...	...	5.00	6.50	8.00	8.50	5.00	6.50	7.50	8.50	6.50	9.00	11.50	12.50
...	...	...	5.00	6.50	8.00	8.50	5.00	6.50	7.50	8.50	6.50	9.00	11.50	12.50
...	...	...	6.00	7.50	9.00	10.00	6.00	8.00	8.50	10.50	6.50	9.00	11.50	12.50
.00	9.50	10.50	†8.50	10.50	12.00	14.00	6.00	7.00	8.00	10.00	5.50	8.00	9.50	10.50
.00	6.00	6.50	†5.00	6.00	7.00	8.00	4.00	5.50	6.50	7.00	4.50	5.00	6.00	7.00
.50	19.50	22.50	4.50	6.00	7.50	8.50	6.00	7.00	8.00	10.00	6.50	7.50	9.00	10.00
.00	7.00	8.00	4.00	5.50	7.00	8.00	6.50	8.00	11.00	13.00	....	....	....	....
.50	19.50	22.50	4.50	6.00	7.50	8.50	6.00	7.00	8.00	10.00	....	....	....	....
...	...	...	4.50	6.00	7.50	8.50	7½	11.00	13.00	15½	6.00	8.00	10.00	11.00
.00	5.00	6.00	3.25	3.75	4.50	5.00	3.50	4.50	5.00	5.75	1.75	2.25	2.75	3.25
.00	5.00	6.00	3.25	3.75	4.50	5.00	3.75	5.00	5.50	6.25	1.75	2.25	2.75	3.25
.00	5.00	6.00	3.25	3.75	4.50	5.00	3.75	5.00	5.50	6.25	1.75	2.25	2.75	3.25
.00	14.00	16.75	†5.00	6.00	7.00	8.00	†4.50	5.50	7.00	7.50	3.75	5.00	6.00	7.00

as and Missouri.			Arkansas and Oklahoma.			
.00	14.00	16.00	3.75	5.00	5.75	6.25
...	...	...	6.50	9.00	11.50	13.50
...	...	...	6.50	9.00	11.50	13.50
.50	19.00	22.00	†8.50	11.00	14.00	16.50
.00	14.00	16.00	†6.50	9.00	11.50	13.50
.50	19.00	22.00	†11.00	16.00	21.00	24.00
...	...	...	7.00	9.50	11.50	13.50
...	...	...	7.00	9.50	11.50	13.50
...	...	...	7.00	9.50	11.50	13.50
...	...	...	7.00	9.50	11.50	13.50
...	...	...	8.00	10.50	13.00	15.50
...	...	...	6.50	9.00	11.50	13.50
.00	14.00	16.00	4.00	5.50	6.50	7.00
.50	19.00	22.00	8.50	11.00	14.00	16.50
.50	7.50	8.50	7.00	9.50	11.00	13.00
.50	19.00	22.00	8.50	11.00	14.00	16.50
.50	19.00	22.00	8.50	11.00	14.00	16.50
.00	14.00	16.00	3.75	5.00	5.75	6.25
.00	14.00	16.00	3.75	5.00	5.75	6.25
.00	14.00	16.00	3.75	5.00	5.75	6.25
.00	14.00	16.00	†6.50	9.00	11.50	13.50

migrant Outfit Intrastate rates in Louisiana, which are dollars per car.

5379-5391 *Intrastate Mileage Rates in Effect in 1907 in States Mentioned on Commodities as Listed.*

	Arkansas. Miles.			Kansas. Miles.			Louisiana. Miles.			Missouri. Miles.			Texas. Miles.		
Commodities.	200	300		200	300		200	300		200	300		200	300	
Brick—Common	5.0	7.0		8.75	11.25		7.0			7.5	10.00		6.00	8.00	
Coal:															
Lump	7.0	9.5		9.00	12.75		9.5	10.25		7.5	9.25		7.0	9.50	
Slack	6.0	8.5		7.2	10.2		9.5	10.25		7.5	9.25		6.25	8.75	
Cement	10.0	13.0		16	21		33.5	42.5		12.0	14.00		18.0	23.00	
Cordwood	5.0	8.0		12	16		7.0			9.0	10.75		1.80	\$2.50	
Emgr. Outfit	18.0	23.0		26	34		\$40	\$50		27.0	34.00		22	23	
Grain:															
Corn	10.0	12.0		11.5	12.5					12.5	14.50		12.5	12.5	
Oats	"	"		"	"					"	"		"	"	
Rye	"	"		"	"					"	"		15.0	15.0	
Barley	"	"		"	"					"	"		"	"	
Wheat	12.0	15.0		13.0	14.0					14.5	16.00		"	"	
Hay	8.5	13.0		16.0	21		15.0	15.0		21	26		15.0	15.0	
Ice	7.0	8.0		10.5	14.0		10.0	10.0		12	15		9.5	11.0	
Lime	7.5	9.0		16	21		33.5	42.5		12.0	14.00		14.0	16.0	
Lumber	7.0	12.0		19.0	22.0		12.0			11.0	13.50				
Plaster	10.0	13.0		16.0	21		33.5	42.5		12.0	14.00				
Salt	8.0	12.0		23.0	27.0					12.0	14.00				
Sand	5.0	8.0		7.75	10.0		7.0			7.5	10.00		5.25	5.25	
Stone	5.0	8.0		8.75	11.25		"			"	"		"	"	
Gravel	5.0	8.0		12.0	16.0		"			"	"		"	"	
Fertilizer	7.5	9.0		12.0	16.0		25.0	31.75		12	15		11.0	15.0	

Interstate Rates Between—

	Arkansas & Louisiana. Miles.		Arkansas & Missouri. Miles.		Arkansas & Oklahoma. Miles.	
Commodities.	200	300	200	300	200	300
Brick—Common	7.0	.....	#25.00	#34.00	8.75	11.25
Coal:						
Lump .....	.....	.....	.....	.....	#20.00	#24.00
Slack .....	.....	.....	.....	.....	#20.00	#24.00
Cement	#33.5	#42.50	#32.00	#42.00	#25.00	#30.00
Cordwood	7.0	.....	#25.00	#34.00	#20.00	#24.00
Emgr. Outfit	#33.5	#42.50	#32.00	#42.00	#38.00	#48.00
Grain:						
Corn .....	.....	.....	.....	.....	18.00	20.00
Oats .....	.....	.....	.....	.....	18.00	20.00
Rye .....	.....	.....	.....	.....	18.00	20.00
Barley .....	.....	.....	.....	.....	18.00	20.00
Wheat .....	.....	.....	.....	.....	23.00	25.00
Hay .....	.....	.....	.....	.....	#20.00	#24.00
Ice	10.0	.....	#25.00	#34.00	10.50	15.00
Lime	7.0	.....	#32.00	#42.00	#25.00	#30.00
Lumber	12.0	.....	12.00	.....	19.00	22.00
Plaster	7.0	.....	#32.00	#42.00	#25.00	#30.00
Salt .....	"	.....	"	"	"	"

Sand	7.0	.....	#25.00	#34.00	8.75	11.25
Stone	7.0	.....	#25.00	#34.00	8.75	11.25
Gravel	7.0	.....	#25.00	#34.00	8.75	11.25
Fertilizer	#25.0	#31.75	#25.00	#34.00	#20.00	#24.00

NOTE.—No rates in Oklahoma for 200 & 300 miles, maximum distance 170 Mi. Rates shown on Cordwood Intrastate in Oklahoma and Texas, are dollars per cord; in all other instances, cents per 100 lbs., except Emigrant Outfit Intrastate rates in Louisiana, which are dollars per car.

Class Rates
% Soft Coal.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT FORTY-FOUR.

EXHIBIT No. 44.

State of Arkansas Matter.

St. Louis, Iron Mountain & Southern Railway Company.
Analysis—Mail Earnings in Arkansas—Six Months Ended December 31, 1907.

Post Office Department—Route.			Arkansas' Proportion on a Track-mile Basis.					
Number.	Between—	And—	Operating Division.	Percent of route in Arkansas.*	Compensation		Deductions and adjustments.	Net compensation received.
					fixed by contract.	Additional allowances.		
145,081	Bergman, Ark.....	Carthage, Mo.....	White River	18.65%	\$450.36	\$208.31	\$ 19	\$658.48
147,041	St. Louis, Mo.....	Texarkana, Ark....	Mo. & Ark. (Main Line.)	63.16%	151,980.06†	2,788.71‡	7,960.34	146,808.43
147,044	McGehee, Ark.....	Clayton Jct., La....	Valley	31.61%	1,336.62	27.11	1.89	1,361.84
149,001	"	Alexandria, La....	"	24.03%	3,010.08	23.28	180.23	2,853.73
147,003	Little Rock, Ark....	Ft. Smith, Ark....	Central	100%	10,254.66	115.47	140.71	10,229.42
147,004	Halley, Ark.....	Warren, Ark.....	Valley	100%	1,552.56	.01	7.92	1,544.65
147,007	Little Rock, Ark....	McGehee, Ark.....	Arkansas	100%	9,017.43	17.00	96.64	8,937.79
147,008	Newport, Ark.....	Bergman, Ark.....	White River	100%	8,534.10	9.00	6.00	8,537.10
147,010	Gurdon, Ark.....	El Dorado, Ark....	Arkansas	100%	3,096.18	....	24.38	3,071.80
147,012	Knobel, Ark.....	Helena, Ark.....	Memphis	100%	8,724.36	15.00	54.56	8,684.80
147,014	Cashman, Ark.....	White River Jct....	White River	100%	265.62	....	3.00	202.62
147,023	Memphis, Tenn....	Bald Knob, Ark....	Memphis†	100%	7,768.53	51.08	223.31	7,596.33
147,025	Ft. Smith, Ark.....	Greenwood, Ark....	Central	100%	441.72	4.00	6.74	438.98
147,060	Arkansas City, Ark..	Trippie, Ark.....	Valley	100%	156.24	....	....	156.24
147,069	Barton Jct., Ark....	McGehee, Ark.....	Memphis	100%	1,685.40	....	129.80	1,555.50
153,005	Ft. Smith, Ark.....	Coffeyville, Kan....	Central‡	....	....	....	....	....
Total.....					\$208,214.55	\$3,258.97	\$8,837.81	\$202,037.71

* Percents represent Arkansas proportion of track mileage covered by routes.

† Compensation changed in July, 1907, and readjusted in October, 1907.

‡ All credited to Arkansas although 1.7 miles of route in Tennessee.

§ Only 2/10 of one mile in Arkansas. No revenue credited to that state.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Gross Earnings per Mile of Road.

For six months ending.			Track mileage.	Gross earnings.	Gross earnings per mile.
June 30th, 1900	1,773.77		\$6,726,202.11	\$3,792.00	
" 30th, 1901	1,773.77		7,917,845.18	4,464.00	
" 30th, 1902	1,773.77		8,350,632.66	4,708.00	
" 30th, 1903	1,815.44		9,448,382.27	5,204.00	
" 30th, 1904	2,224.19		9,454,231.73	4,251.00	
" 30th, 1905	2,355.93		9,371,408.33	3,978.00	
" 30th, 1906	2,434.37		10,814,122.50	4,442.00	
" 30th, 1907	2,531.47		12,153,773.86	4,801.00	
" 30th, 1908	2,599.15		9,407,346.38	3,619.00	
Dec. 31st, 1900	1,773.77		\$7,854,834.35	\$4,428.00	
" 31st, 1901	1,773.77		9,043,175.79	5,098.00	
" 31st, 1902	1,773.77		9,289,945.78	5,237.00	
" 31st, 1903	2,113.28		10,128,966.95	4,792.00	
* " 31st, 1904	2,291.84		10,334,596.81	4,509.00	
" 31st, 1905	2,355.93		10,395,654.67	4,413.00	
" 31st, 1906	2,459.15		11,833,245.96	4,812.00	
" 31st, 1907	2,599.15		12,385,947.41	4,765.00	

* World's Fair Year.

5398

Train No. 1.

Corning.
 Walnut Ridge.
 Hoxie.
 Newport.
 Higginson.
 Little Rock.
 Benton.
 Malvern.
 Arkadelphia.
 Gurdon.
 Prescott.
 Hope.
 Fulton.
 13 stops.
 305 miles.

Train No. 4.

Hope.
 Benton.
 Little Rock.
 Newport.
 Hoxie.
 Knobel.
 6 stops.
 305 miles.

Train No. 3.

Knobel.
 Hoxie.
 Newport.
 Bald Knob.
 Little Rock.
 Benton.
 Malvern.
 Arkadelphia.
 Prescott.
 Hope.
 10 stops.
 305 miles.

Train No. 6.

Fulton.
 Hope.
 Prescott.
 Gurdon.
 Arkadelphia.
 Malvern.
 Benton.
 Little Rock.
 Newport.
 Hoxie.
 10 stops.
 305 miles.

Train No. 5.

Knobel.
 Hoxie.
 Newport.
 Argenta.
 Little Rock.
 Benton.
 Malvern.
 Arkadelphia.
 Gurdon.
 Prescott.
 Hope.
 Fulton.
 12 stops.
 305 Miles.

Train No. 18.

Little Rock.
 Newport.
 Hoxie.
 3 stops.
 184 miles.

Train No. 7.

Hoxie.
 Little Rock.
 Texarkana.
 3 stops.
 305 miles.

Train No. 17.

Hoxie.
 Newport.
 Little Rock.
 Benton.
 4 stops.
 184 miles.

Statement of Relative Stops of Passenger Trains in Arkansas.

5399

Time Table of May 12th, 1907.

In Effect in October, 1907.

Local Trains.

No.	to	from	miles	stops
8. Texarkana	to State Line	305	35	
No. 202.	" Bald Knob	202	18	"
No. 24.	" State Line	305	68	"
No. 806.	" Little Rock	147	36	"
No. 22.	" State Line	161	34	"
No. 26.	" "	161	33	"
No. 204.	" Bald Knob	57	12	"
No. 23.	" Little Rock	161	35	"
No. 25.	" "	161	34	"
No. 223.	" Texarkana	202	45	"
No. 205.	" Little Rock	57	12	"
No. 805.	" El Dorado	147	36	"
No. 103.	" McGehee	102	16	"
No. 105.	" "	102	24	"
No. 137.	" Pine Bluff	43	15	"
No. 104.	" Little Rock	102	14	"
No. 106.	" "	102	23	"
No. 138.	" "	43	15	"
No. 9-210.	" Bridge Jct. via Knobel & Wynne..	139	21	"
No. 307.	" Helena	140	35	"
No. 309.	" "	58	17	"
No. 10-209.	" State Line via Wynne & Knobel...	139	14	"
No. 304.	" Knobel	140	35	"

No. 310.	"	Wynne	58	"	17	"
No. 223.	Bridge Jct.	" Bald Knob	89	"	25	"
No. 205.	"	" "	89	"	21	"
No. 203.	"	" "	89	"	3	"
No. 202.	Bald Knob	" Bridge Jct.	89	"	5	"
No. 204.	"	" "	89	"	25	"
No. 208.	"	" "	89	"	18	"
No. 103.	McGehee	" La. State Line	46	"	8	"
No. 105.	"	" "	46	"	11	"
No. 104.	La. State Line	" McGehee	46	"	7	"
No. 106.	"	" "	46	"	11	"
No. 325.	McGehee	" La. State Line via M. H. & L. Line.	47	"	11	"
No. 326.	La. State Line	" McGehee via M. H. & L. Line.	47	"	11	"
No. 825.	Warren	" McGehee via Arkansas City	57	"	15	"
No. 826.	McGehee	" Warren via Ark. City	57	"	15	"
No. 209.	Ark. State Line to Newport, White River Line		180	"	36	"
5400 Bro't Forward			4340 miles, 866 stops.			
No. 210.	Newport	to Ark. State Line, White River Line.	180 miles, 36 stops.			
No. 103.	Ark. State line	" Little Rock, Central Division	161	"	32	"
No. 105.	do.	" do.	164	"	14	"
No. 131.	Russellville	" Little Rock	74	"	13	"
No. 133.	Ft. Smith	" Russellville	87	"	17	"
No. 104.	Argenta	" Ark. State Line via Cent. Div.	162	"	32	"
No. 106.	"	" do.	164	"	14	"
No. 132.	"	" Russellville	74	"	13	"
No. 134.	Russellville	" Ft. Smith	87	"	17	"
Total			5493	"	1054	"

Average 5.2 miles.

Train No. 8.

Little Rock.
 Argenta.
 McAlmont.
 Jacksonville.
 Holland.
 Cabot.
 Austin.
 Ward.
 Bebee.
 McKae.
 Garner.
 Higginson.
 Kensett.
 Judsonia.
 Bald Knob.
 Russell.
 Bradford.
 Grand Glaise.
 Olyphant.
 Newport.
 Diaz.
 Campbell.
 Tuckerman.
 Swifton.
 Alica.
 Minturn.
 Hoxie.

Train No. 202.

Mandeville.
 Homan.
 Fulton.
 Sheppard.
 Gurnsey.
 Hope.
 Emmett.
 Prescott.
 Boughton.
 Biene.
 Gurdon.
 Smithton.
 Arkadelphia.
 Malvern.
 Benton.
 Little Rock.
 Higginson.
 Bald Knob.
 18 stops.
 202 miles.

Train No. 24.

Mandeville.
 Homan.
 Fulton.
 Sprudell.
 Sheppard.
 Gurnsey.
 Hope.
 Emmett.
 Prescott.
 Boughton.
 Biene.
 Gurdon.
 Smithton.
 Curtis.
 Gum Springs.
 Arkadelphia.
 Daleville.
 Witherspoon.
 Oak Leaf.
 Donaldson.
 Saginaw Jct.
 Elmore.
 Walco.
 Malvern.
 Perla.
 Gifford.
 Traskwood.

Garner.
 Higginson.
 Kensett.
 Judsonia.
 Bald Knob.
 Russell.
 Bradford.
 Grand Glaise.
 Olyphant.
 Newport.
 Diaz.
 Campbell.
 Tuckerman.
 Swifton.
 Alica.
 Minturn.
 Hoxie.
 Walnut Ridge.
 Murta.
 O'Kean.
 Delaplaine.
 Peach Orchard.
 Knobel.
 Corning.
 Moark.
 68 Stops.

305 Miles.

Haskells.
Benton.
Bryant.
Alexander.
Mabelvale.
Ensign.
Little Rock.
Argenta.
McAlmont.
Wooleys.
Jacksonville.
Cabot.
Austin.
Ward.
Beebe.
McRae.

5402

Train No. 803.

McMurrain.
Norphlet.
Smackover.
Griffin.
Louann.
Kirkland.
Elliott.
Tate.
Camden.
Lester.
Chidester.

Train No. 22.

Argenta.
McAlmont.
Jacksonville.
Wooleys.
Cabot.
Austin.
Ward.
Beebe.
McRae.
Garner.
Higginson.

Train No. 26.

Argenta.
McAlmont.
Jacksonville.
Wooleys.
Cabot.
Austin.
Ward.
Beebe.
McRae.
Garner.
Higginson.

Train No. 204.

Argenta.
McAlmont.
Jacksonville.
Cabot.
Austin.
Ward.
Beebe.
Garner.
Higginson.
Kensett.
Judsonia.

35 stops.
305 miles.

Walnut Ridge.
Murta.
O'Kean.
Delaplaine.
Peach Orchard.
Knobel.
Corning.
Moark.

Bald Knob.

12 stops
57 miles.

Kensett.
 Judsonia.
 Bald Knob.
 Russell.
 Bradford.
 Grand Glaise.
 Olyphant.
 Newport.
 Diaz.
 Campbell.
 Tuckerman.
 Swifton.
 Alica.
 Minturn.
 Hoxie.
 Walnut Ridge.
 O'Kean.
 Delaplaine.
 Peach Orchard.
 Knobel.
 Corning.
 Moark.
 33 stops.
 161 miles.

Kensett.
 Judsonia.
 Bald Knob.
 Russell.
 Bradford.
 Grand Glaise.
 Olyphant.
 Newport.
 Diaz.
 Campbell.
 Tuckerman.
 Swifton.
 Alica.
 Minturn.
 Hoxie.
 Walnut Ridge.
 O'Kean.
 Delaplaine.
 Peach Orchard.
 Knobel.
 Schrenk.
 Corning.
 Moark.
 34 stops.
 161 miles.

Sayre.
 Reader.
 Whelen.
 Gurdon.
 Smithton.
 Curtis.
 Gum Springs.
 Arkadelphia.
 Daleville.
 Witherspoon.
 Oak Leaf.
 Donaldson.
 Elmore.
 Saginaw Junct.
 Walco.
 Malvern.
 Gifford.
 Traskwood.
 Haskells.
 Benton.
 Bryant.
 Alexander.
 Mabelvale.
 Ensign.
 Little Rock.
 36 stops.
 147 miles.

Train No. 23.

Moark.
 Corning.
 Schrenk.
 Knobel.
 Peach Orchard.
 Delaplaine.
 O'Keen.
 Murta.
 Walnut Ridge.
 Hoxie.
 Minturn.
 Alica.
 Swifton.
 Tuckerman.
 Campbell.
 Diaz.
 Newport.
 Olyphant.
 Grand Glaise.
 Bradford.
 Russell.
 Bald Knob.
 Judsonia.
 Kensett.
 Higginson.
 Garner.
 McRea.

Train No. 25.

Moark.
 Corning.
 Knobel.
 Peach Orchard.
 Delaplaine.
 O'Keen.
 Walnut Ridge.
 Hoxie.
 Minturn.
 Alica.
 Swifton.
 Tuckerman.
 Campbell.
 Diaz.
 Newport.
 Olyphant.
 Grand Glaise.
 Bradford.
 Russell.
 Bald Knob.
 Judsonia.
 Kensett.
 Higginson.
 Garner.
 McRae.
 Beebe.
 Ward.

Train No. 223.

Bald Knob.
 Judsonia.
 Kensett.
 Higginson.
 Garner.
 Beebe.
 Ward.
 Austin.
 Cabot.
 Jacksonville.
 McAlmont.
 Argenta.
 Little Rock.
 Ensign.
 Mabelvale.
 Alexander.
 Bryant.
 Benton.
 Haskells.
 Traskwood.
 Gifford.
 Perla.
 Malvern.
 Walco.
 Saginaw Jct.
 Elmore.
 Donaldson.

Train No. 205.

Bald Knob.
 Judsonia.
 Kensett.
 Higginson.
 Garner.
 Beebe.
 Ward.
 Austin.
 Cabot.
 Jacksonville.
 McAlmont.
 Argenta.
 12 stops.
 57 miles.

Beebe.
Ward.
Austin.
Cabot.
Wooleys.
Jacksonville.
McAlmont.
Argenta.

35 stops.
161 miles.

Austin.
Cabot.
Holland.
Wooleys.
Jacksonville.
McAlmont.
Argenta.

34 stops.
161 miles.

Oak Leaf.
Witherspoon.
Daleville.
Arkadelphia.
Gum Springs.
Curtis.
Smithton.
Gurdon.
Biene.
Boughton.
Prescott.
Emmett.
Hope.
Sheppard.
Sprudell.
Fulton.
Homan.
Mandeville.

45 stops.
202 miles.

Train No. 805.

Ensign.
Mabelvale.
Alexander.
Bryant.
Benton.
Haskells.

Train No. 103.

East Little Rock.
Rottaken.
Woodson.
Farrells.
Redfield.
Kearney.

Train No. 105.

East Little Rock.
East Little Rk. Yd.
Wrightsville.
Rottaken.
Woodson.
Farrells.

Train No. 137.

East Little Rock.
College Station.
Sweet Home.
Rottaken.
Higgins.
Wrightsville.

Woodson.
Farrells.
Redfield.
Kearney.
Jeff. Springs.
Eastwood.
Samples.
Dexter.
Baldwin.
15 stops.
43 miles.

Redfield.
Kearney.
Jeff. Springs.
Dexter.
Pine Bluff.
Fairfield.
Noble Lake.
Moscow.
Tamo.
Grady.
Verner.
Gould.
Lear.
Reedville.
Dumas.
Walnut Lake.
Winchester.
Tillar.
24 stops.
102 miles.

Pine Bluff.
Noble Lake.
Tamo.
Grady.
Verner.
Gould.
Dumas.
Walnut Lake.
Winchester.
Tillar.
16 stops.
102 miles.

Traskwood.
Gifford.
Malvern.
Walco.
Etta.
Saginaw Jet.
Elmore.
Donaldson.
Oak Leaf.
Witherspoon.
Daleville.
Arkadelphia.
Gum Springs.
Curtis.
Smithton.
Gurdon.
Whelen.
Reader.
Sayre.
Chidester.
Lester.
Camden.
Tate.
Elliott.
Kirkland.
Louann.
Griffin.
Smackover.
Norphlet.
McMurrain.

36 stops.
147 miles.

5405

Train No. 104.

Tillar.
Walnut Lake.
Dumas.
Varner.
Grady.
Tamo.
Moscow.
Noble Lake.
Fairfield.
Pine Bluff.
Kearney.
Redfield.
Farrells.
E. Little Rock.

14 stops.
102 miles.

Train No. 106.

Tillar.
Winchester.
Walnut Lake.
Dumas.
Reedville.
Lear.
Gould.
Varner.
Grady.
Tamo.
Moscow.
Noble Lake.
Fairfield.
Pine Bluff.
Dexter.
Jeff. Springs.
Kearney.
Redfield.
Farrells.
Woodson.
Rottaken.
Wrightsville.
E. Little Rock.

23 stops.
102 miles.

Train No. 138.

Baldwin.
Dexter.
Samples.
Eastwood.
Jeff. Springs.
Kearney.
Redfield.
Farrells.
Woodson.
Rottaken.
Wrightsville.
Higgins.
Sweet Home.
College Station.
E. Little Rock.

15 stops.
43 miles.

Train No. 9-210.

Corning.
Knobel.
Paragould.
Nettleton.
Harrisburg.
Cherry Valley.
Vannsdale.
Wynne.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.
Gavin.
St. Francis Club House.
Smithdale.
Princedale.
Grassy Lake.
Lansing.
Ebony.
Blanton.

21 stops.
139 miles.

5406

Train No. 307.

Stonewall.
 Gainessville.
 Paragould.
 Bethel.
 Brookland.
 Nettleton.
 Ridge.
 Greenfield.
 Harrisburg.
 White Hall.
 Cherry Valley.
 Vandale.
 Wynne.
 Colt.
 Caldwell.
 Forrest City.
 Bonair.
 Haynes.
 Wrightland.
 Felton.
 Marianna.
 La Grange.
 Lexa.
 Latour Jct.
 Ark. Midland Jct.
 Hooker.
 Lafa.

153—813

Train No. 309.

Colt.
 Caldwell.
 Forrest City.
 Bonair.
 Haynes.
 Wrightland.
 Felton.
 Marianna.
 La Grange.
 Lexa.
 Latour Jct.
 Ark. Midland Jct.
 Canaan.
 White Oak.
 Hyde Park.
 Glenwood.
 Huma.
 17 stops.
 58 miles.

Train No. 209-10.

Crawfordsville.
 Earle.
 Parkin.
 Wynne.
 Vandale.
 Cherry Valley.
 Harrisburg.
 Nettleton.
 Paragould.
 Stonewall.
 Knobel.
 Corning.
 Club House.
 St. Francis C. H.
 14 stops.
 139 miles.

Train No. 304.
 Arkansas Mid. Jct.
 Latour Jct.
 Lexa.
 La Grange.
 Marianna.
 Felton.
 Wrightland.
 Haynes.
 Bonair.
 Forrest City.
 Caldwell.
 Colt.
 Wynne.
 Vandale.
 Cherry Valley.
 White Hall.
 Harrisburg.
 Greenfield.
 Ridge.
 Nettleton.
 Brookland.
 Bethel.
 Paragould.
 Gainessville.
 Stonewall.
 Hooker.
 Lafa.

Smithville.
Hydrick.
Mershman.
Canaan.
White Oak.
Hyde Park.
Glenwood.
Huma.

35 stops.
140 Miles.

Train No. 203.

Wynne.
Fair Oaks.
New Augusta.

3 stops.
89 miles.

Train No. 205.

Bridge Jct.
Gavin.
Vincent.
Crawfordsville.
Earle.
Parkin.
Levesque.
Wynne.
Hamlin.
Fair Oaks.
McCrory.
Jelks.
Fakes.
New Augusta.
Rio Vista.

Train No. 223.

Bridge Junction.
Almont.
Gavin.
Vincent.
Crawfordsville.
Earle.
Parkin.
Levesque.
Wynne.
Hamlin.
Fair Oaks.
Morton.
McCrory.
Jelks.
Fakes.

Train No. 310.

Ark. Midland Jct.
Latour Jct.
Lexa.
La Grange.
Marianna.
Felton.
Wrightland.
Haynes.
Bonair.
Forrest City.
Caldwell.
Colt.
Canaan.
White Oak.
Hyde Park.

Smithville.
Hydrick.
Mershman.
Canaan.
White Oak.
Hyde Park.
Glenwood.
Huma.

35 stops.
140 miles.

5407

Glenwood.
Huma.

17 stops.
58 miles.

5408

Train No. 202.

New Augusta.
McCrory.
Fair Oaks.
Wynne.
Bridge Jct.

5 stops.
89 miles.

**New Augusta.
Rio Vista.
Blanton.
Ebony.
Lansing.
Grassy Lake.
Smithdale.
McDonald.
St. Francis C.
Princeton.**

25 stops.
89 miles.

Train No. 204.

Rio Vista.
New Augusta.
Fakes.
Jelks.
McCrory.
Morton.
Fair Oaks.
Hamlin.
Wynne.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.
Gavin.

Blanton.
Ebony.
Lansing.
Grassy Lake.
Smithdale.
Princeton.

21 stops.
89 miles.

Train No. 208.

Rio Vista.
New Augusta.
Fakes.
Jelks.
McCrory.
Morton.
Fair Oaks.
Hamlin.
Wynne.
Crowleys.
Levesque.
Parkin.
Earle.
Crawfordsville.
Vincent.

Train No. 103.

**McGehee.
Dermott.
Blissville.
Morrell.
Montrose.
Portland.
Parkdale.
Wilmot.**

8 stops.
46 miles.

Almont.
 Bridge Jct.
 Blanton.
 Ebony.
 Lansing.
 Grassy Lake.
 Smithdale.
 McDonald.
 St. Francis C. H.
 Prinedale.

25 stops.
 89 miles.

Train No. 105.

McGehee.
 Dermott.
 Hudspeth.
 Blissville.
 Morrell.
 Montrose.
 Portland.
 Parkdale.
 Wilmot.
 Cypress.
 Sunshine.

11 stops.
 46 miles.

Gavin.
 Almont.
 Bridge Jct.

18 stops.
 89 miles.

Train No. 106.

Cypress.
 Wilmot.
 Parkdale.
 Sunshine.
 Portland.
 Montrose.
 Morrell.
 Blissville.
 Hudspeth.
 Dermott.
 McGehee.

11 stops.
 46 miles.

Train No. 325.

Trippe Jct.
 Halley.
 Macon.
 Lake Village.
 Jennie.
 Chicot.
 Eudora.
 Readland.
 Arkla.
 Hollywood.
 Nordman.

11 stops.
 47 miles.

5409

Train No. 326.

Arkla.
Readland.
Eudora.
Chicot.
Jennie.
Jennie.
Lake Village.
Macon.
Halley.
Nordman.
Hollywood.
Trippe Jct.
11 stops.
47 miles.

Train No. 825.

Wilmot.
Monticello.
Deane.
Cominto.
Collins.
Baxter.
Dermott.
Hurd.
Halley.
Constance.
Jeter.
Allis.
Saline.
Boggy Bayou.
Arkansas City.
15 stops.
57 miles.

Train No. 826.

Arkansas City.
Boggy Bayou.
Saline.
Allis.
Jeter.
Constance.
Halley.
Hurd.
Dermott.
Baxter.
Collins.
Cominto.
Deane.
Monticello.
Wilmot.
15 stops.
57 miles.

Train No. 209.

Crest.
Crocket.
Myrtle.
Bergman.
Zinc.
Pyatt.
Comal.
Yellville.
Flippin.
Cotter.
Buffalo.
Hayney.
Norfolk.
Herron.
Berry.
Calico.
Creswell.
Wideman.
Mount Olive.
Sylamore.
Handford.
Guion.
Penters Bluff.
Walls Ferry.
O'Neal.
Earnharts.
White River Jct.

Batesville.
 Moorefield.
 Sulphur Rock.
 Newark.
 Paroquet.
 Diaz.
 Magness.
 Vest.
 St. Clairs Quarry.

36 stops.
 180 miles.

Train No. 131.

Galla.
 Arkins.
 Blackville.
 Germantown.
 Morrelton.
 Plummerville.
 Menifee.
 Gleason.
 Conway.
 Mayflower.
 Palarm.
 Marsche.
 Argenta.

13 stops.
 74 miles.

Train No. 105.

Ft. Smith.
 Van Buren.
 Alma.
 Mulberry.
 Ozark.
 Denning.
 Clarkesville.
 Russellville.
 Atkins.
 Morrelton.
 Plummerville.
 Conway.
 Palarm.
Argenta.

14 stops.

Train No. 103.

Ft. Smith.
 Van Buren.
 Alma.
 Dyer.
 Mulberry.
 White Oak.
 Popping.
 Ozark.
 Altus.
 Cole Hill.
 Hartman.
 Spadra.
 Clarksville.
 Cabin Creek.
 Knoxville.
 Piney.

5410

Train No. 210.

Diaz.
 Paroquet.
 Newark.
 Sulphur Rock.
 Moorefield.
 Batesville.
 White River Jct.
 Earnharts.
 O'Neal.
 Walls Ferry.
 Penters Bluff.
 Guion.
 Handford.
 Sylamore.
 Mount Olive.

164 Miles.

Wideman.	London.
Creswell.	Mill Creek.
Calico.	Russellville.
Berry.	Galla.
Herron.	Atkins.
Norfolk.	Blackville.
Hayney.	Germantown.
Buffalo.	Morrelton.
Cotter.	Plummerville.
Magnes.	Menifee.
Vest.	Gleason.
St. Clairs Quarry.	Conway.
Flippin.	Mayflower.
Yellville.	Palarin.
Comal.	Marche.
Pyatt.	Argenta.
Zinc.	32 stops.
Bergman.	161 miles.
Myrtle.	
Crocket.	
Crest.	
36 stops.	
180 miles.	

5411

Train No. 133.

Mill Creek.
 London.
 Piney.
 Knoxville.
 Cabin Creek.
 Clarksville.
 Spadra.
 Hartman.
 Coal Hill.
 Altus.
 Ozark.
 Popping.
 White Oak.
 Mulberry.
 Dyer.
 Alma.
 Van Buren.

17 stops.
 87 miles.

Train No. 104.

Argenta.
 Marche.
 Palarm.
 Mayflower.
 Conway.
 Gleason.
 Menifee.
 Plummerville.
 Morrelton.
 Germantown.
 Blackville.
 Atkins.
 Galla.
 Russellville.
 Mill Creek.
 London.
 Piney.
 Knoxville.
 Cabin Creek.
 Clarksville.
 Spadra.
 Hartman.
 Coal Hill.
 Altus.
 Ozark.
 Popping.
 White Oak.

Train No. 106.

Argenta.
 Palarm.
 Conway.
 Clarksville.
 Morrelton.
 Atkins.
 Russellville.
 Clarksville.
 Denning.
 Ozark.
 Mulberry.
 Alma.
 Van Buren.
 Ft. Smith.
 14 stops.
 164 miles.

Train No. 132.

Argenta.
 Marche.
 Palarm.
 Mayflower.
 Conway.
 Gleason.
 Menifee.
 Plummerville.
 Morrelton.
 Germantown.
 Blackville.
 Atkins.
 Galla.

13 stops.
 74 miles.

Train No. 134.

Mill Creek.
 London.
 Piney.
 Knoxville.
 Cabin Creek.
 Clarksville.
 Spadra.
 Hartman.
 Altus.

Mulberry.
Dyer.
Alma.
Van Buren.
Ft. Smith.
32 stops.
162 miles.

Coal Hill.
Ozark.
Popping.
White Oak.
Mulberry.
Dyer.
Alma.
Van Buren.
17 stops.
87 Miles.

5412

EXHIBIT FORTY-SEVEN.

5413

EXHIBIT No. 47.

Statement of Capital Stock and Dividends, St. Louis, Iron Mountain & Southern Railway Company, Fiscal Years Ending June 30th, from 1904 to 1909, Inclusive.

	1904.	1905.	1906.	1907.	1908.	1909.
Average miles operated.....	2,231.72	2,355.93	2,459.15	2,495.31	2,599.15	2,608.59
Capital Stock.....	\$25,788,435.00	\$29,390,098.59	\$44,390,098.59	\$44,390,098.59	\$44,391,298.59	\$44,391,298.59
Dividends on stock.	2,578,831.50	2,578,831.50	4,114,588.10	4,438,991.50	2,219,555.75	1,775,644.60
Per cent of dividends.....	10%	10%	10%	10%	5%	4%

5414

EXHIBIT FORTY-EIGHT.

5415-5678

EXHIBIT No. 48.

St. Louis, Iron Mountain & Southern Railway Company, Fixed and Obligatory Charges, Fiscal Years Ending June 30th, 1906 and 1907.

	Year ending June 30th, 1906.	Year ending June 30th, 1907.
Taxes	\$536,020.29	\$569,274.24
Rentals, account Leased Roads	86,220.00	86,220.00
Interest on Bonds	4,651,040.02	4,785,797.12
Sundry Amounts	182,596.88	250,870.75
Total	\$5,455,877.19	\$5,692,162.11
Capital Stock	\$44,390,098.59	\$44,390,098.59
Dividend on Stock	4,114,588.10	4,438,991.50
Per cent of Dividend	10%	10%
Owned Mileage	2,393.54	2,464.72

5681

5682

EXHIBIT FIFTY-ONE.

EXHIBIT No. 51.

From Memphis, Tenn., To	Canned Goods.						Iron, Bar, Band, Boiler; Horse and Mule Shoes.						Wire and Nails.						Lime.					
	Carloads.			Less Carloads in tin.			Carloads.			Less Carloads.			Carloads.			Less Carloads.			Carloads.			Less Carloads.		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
*Sorrells	30	24	6	40	33	7	20	17	3	31	27	4	18	17	1	31	27	4	13	13	0	27	27	
*Faith	30	25	5	40	34	6	20	17	3	31	27	4	18	17	1	31	27	4	13	13	0	27	27	
*Kedron	33	27	8	45	34	11	24	17	7	35	27	8	22	17	5	35	27	8	16	13	3	31	28	
*Cabool	36	25	11	50	34	16	27	18	9	39	29	10	25	18	7	39	29	10	19	13	6	35	28	
*Clio	36	25	11	50	34	16	27	18	9	39	29	10	25	18	7	39	29	10	19	13	6	35	28	
*Porters Mill	36	25	11	50	34	16	27	18	9	39	29	10	25	18	7	39	29	10	19	13	6	35	28	
*Rison	39	26	13	50	35	15	30	18	12	41	29	12	28	18	10	41	29	12	20	13	7	37	28	
*Pool	42	26	16	50	35	15	33	20	13	42	31	11	31	20	11	42	31	11	20	14	6	37	30	
*Saline	42	26	16	50	35	15	33	20	13	42	31	11	31	20	11	42	31	11	20	14	6	37	30	
*Draughon	42	26	16	50	35	15	33	20	13	42	31	11	31	20	11	42	31	11	20	14	6	37	30	
*Kingsland	42	27	15	50	36	14	33	20	13	42	31	11	31	20	11	42	31	11	20	14	6	37	30	
*Clarks	42	27	15	50	36	14	33	20	13	42	31	11	31	20	11	42	31	11	20	14	6	37	30	
*Fordyce	44	28	16	50	37	13	38	20	18	45	31	14	36	20	16	45	31	14	20	14	6	37	30	
*Thornton	44	28	16	50	37	13	38	20	18	45	31	14	36	20	16	45	31	14	20	14	6	37	30	
*Little Bay	44	29	15	50	38	12	38	20	18	45	31	14	36	20	16	45	31	14	20	14	6	37	30	
*Harlow	44	29	15	50	38	12	38	20	18	45	31	14	36	20	16	45	31	14	20	14	6	37	30	
*Betts	46	30	16	50	39	11	38	22	16	45	31	14	36	22	14	45	31	14	20	15	5	37	32	
*Bearden	46	30	16	50	39	11	38	22	16	45	31	14	36	22	14	45	31	14	20	15	5	37	32	
*Millville	48	30	18	52	39	13	38	22	16	46	31	15	37	22	15	46	31	15	20	15	5	38	32	
*Eagle Mills	50	30	20	54	39	15	39	22	17	47	31	16	38	22	16	47	31	16	20	15	5	39	32	
*Onalaska	51	30	21	54	39	15	40	22	18	48	31	17	39	22	17	48	31	17	20	15	5	39	32	
*Lake	51	30	21	54	39	15	40	22	18	48	31	17	39	22	17	48	31	17	20	15	5	39	32	
*Finn	53	32	21	61	41	20	44	23	21	53	32	21	44	23	21	53	32	21	20	15½	4½	45	33	
*Buena Vista	53	32	21	63	41	22	45	23	22	55	32	23	45	23	22	55	32	23	20	15½	4½	46	33	
*Ogemaw	53	32	21	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Stephens	53	32	21	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Hodgsons	53	32	21	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Milner	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*McNeil	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Waldo	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Lumber	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Buckner	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Stamps	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	
*Lewisville	53	33	20	65	41	24	45	23	22	56	32	24	45	23	22	56	32	24	20	15½	4½	47	33	

* No agent; freight must be prepaid.

Column No. 1. Rates in effect April 10th, 1900.

Column No. 2. Rates in effect September 6th, 1910.

Column No. 3. Decrease.

Endorsed: Filed June 8th, 1910. W. P. Felld, Clerk. By W. Presley Felld, D. C.

			Mattresses.			Spring beds S. U.			Packing house products.			Salt.								
Less Carloads.			Less Carloads.			Less Carloads.			Less Carloads.			Carloads.			Less Carloads.					
1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
27	27	0	80	52	28	160	78½	81½	32	31	1	15	10	5	27	24	3			
27	27	0	80	52	28	160	78½	81½	32	31	1	15	10	5	27	24	3			
31	28	3	85	52	33	170	79½	90½	37	31	6	15	11	4	29	24	5			
35	28	7	90	52	38	180	79½	100½	41	31	10	15	11	4	32	24	8			
35	28	7	90	52	38	180	79½	100½	41	31	10	15	11	4	32	24	8			
35	28	7	90	53	37	180	81½	98½	41	32	9	15	11	4	32	24	8			
37	28	9	90	54	36	180	82½	97½	43	32	11	15	11	4	32	24	8			
37	30	7	90	54	36	180	82½	97½	44	32	12	15	12	3	32	26	6			
37	30	7	90	54	36	180	82½	97½	44	32	12	15	12	3	32	26	6			
37	30	7	90	54	36	180	82½	97½	44	32	12	15	12	3	32	26	6			
37	30	7	90	54	36	180	82½	97½	44	32	12	15	12	3	32	26	6			
37	30	7	90	54	36	180	82½	97½	44	32	12	15	12	3	32	26	6			
37	30	7	90	55	35	180	84½	95½	46	32	14	17	12	5	34	26	8			
37	30	7	90	55	35	180	85½	94½	46	35	11	18	12	6	35	26	9			
37	30	7	90	55	35	180	85½	94½	46	35	11	19	12	7	35	26	9			
37	30	7	90	56	34	180	85½	94½	46	35	11	20	12	8	36	26	10			
37	32	5	90	56	34	180	85½	94½	46	35	11	20	13	7	36	26	10			
37	32	5	90	56	34	180	85½	94½	46	35	11	20	13	7	36	26	10			
38	32	6	90	56	34	180	85½	94½	47	35	12	20	13	7	37	26	11			
39	32	7	90	56	34	180	85½	94½	48	35	13	20	13	7	38	26	12			
39	32	7	90	57	33	180	87½	92½	48	35	13	20	13	7	38	26	12			
39	32	7	90	57	33	180	87½	92½	48	35	13	20	13	7	38	26	12			
45	33	12	92	58	34	184	88½	95½	52	35	17	20	13	7	41	26	15			
46	33	13	95	60	35	190	91½	98½	54	36	18	20	13½	6½	42	26	16			
47	33	14	98	61	37	196	93½	102½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	61	37	196	93½	102½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	61	37	196	93½	102½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	61	37	196	93½	102½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			
47	33	14	98	63	35	196	96½	99½	56	36	20	20	13½	6½	43	26	17			

EXHIBIT FIFTY.

EXHIBIT No. 50.

Class Rates to Little Rock and Pine Bluff.

From	1	2	3	4	5	A	B	C	D	E
Memphis	70	60	45	32	24	25	20	17	14	10
Cairo	90	75	55	40	29	30	25	21	17	12
Difference.....	20	15	10	8	5	5	5	4	3	2
Memphis	70	60	45	32	24	25	20	17	14	10
St. Louis	1.00	85	65	45	34	35	30	25	20	15
Difference.....	30	25	20	13	10	10	10	8	6	5
Memphis	70	60	45	32	24	25	20	17	14	10
*Kansas City	1.10	90	75	55	43	45	40	30	27	24
Difference.....	40	30	30	23	19	20	20	13	13	14

*Tariff No. 1010.

Balance of rates are in Tariff No. 1374.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows pasteur, marked pp. 5681 and 5682.)

5683

5684

EXHIBIT FIFTY-TWO.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Terminal Handling of Loaded Cars on Through Trains, October, 1907.

Into Hoxie, 10/1/07, 3:55 p. m. Train 2/71.		Into Argentina, 10/2/07, 2:20 p. m. Train #55.		Out of Hoxie.		Out of Argentina.	
				Oct. 1st, 11:20 p. m., Train #55.		Oct. 2nd, 6:00 p. m., Train 1/81.	
MP	60208	MDT	14976				
"	15481	"	10870			"	"
GT	9708	SAL	22497	"	"	"	"
DM&S	19660	MP	34564	"	"	"	"
MP	33988	PRR	94484	"	"	"	"
"	30146	"	70134	"	"	"	"
KCMO	3386	G&FS	8093	"	"	"	"
URT	4202	MP	33988	"	"	"	"
"	6602	"	30146	"	"	"	"
RI	67864	KCMO	3386	"	"	"	"
IM&S	8590	IM&S	14558	"	"	"	"
MP	35352	MP	34788	"	"	"	"
URT	3447	"	13214	"	"	"	"
SOU	36649	"	17124	"	"	"	"
RI	34958	ART	5147	"	"	"	"
IM&S	14555	MP	26377	"	"	"	"
MP	34788	PFE	3657	"	"	"	"
"	13214	MP	18029	"	"	"	"
"	17124	RC	1095	"	"	"	"

*Not out on Train #55 Oct. 1st.			
PL&E	2614	Oct. 2nd, 7:45 p. m.,	Train 2/81.
MP	38716	" 3d, 4:55 a. m.,	" Ex.
IM&S	11845	" 4th, 3:05 p. m.,	" "
CBT	713	" "	" "
MP	17413	Oct. 2nd, 6:00 p. m.,	" 1/81.
"	33908	" "	" "
"	12617	" "	" "
"	25447	" "	" "
CB&Q	92977	" "	" "
IM&S	4808	" "	" 2/81.
SF	12618	" "	" "
	60		50

*Not out of Argentina Oct. 2nd.

5685

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Terminal Handling of Loaded Cars on Through Trains, October, 1907.

Into Hoxie,		Out of Hoxie.		Into Argentina.		Out of Argentina.	
10/6/07, 3:20 p. m.		Oct. 6th, 4:20 p. m.,		10/7/07, 1:53 a. m.		Oct. 7th, 5:10 a. m.,	
T&P	15730	" "	Train #55.	T&P	15730	" "	Train #55 & Ex.
MP	63757	" "	" "	MP	63757	" "	" "
"	14576	" "	" "	"	14576	" "	" "
SW	14386	" "	" "	SW	14386	" "	" "
RC	1325	" "	" "	RC	1325	" "	" "
"	1028	" "	" "	"	1028	" "	" "
"	1300	" "	" "	"	1300	" "	" "

*Not out of Argentina on Oct. 7th.

*Not out of Hoxie on Train
#55 Oct. 6th.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Terminal Handling of Loaded Cars on Through Trains, October 1907.

Into Hoxie. 10/12/07 2:50 p. m. Train 71.	Out of Hoxie.	Into Argenta. 10/13/07 2:40 a. m. Trn. 55.	Out of Argenta.
19027	Oct. 12th 4:20 p. m.,	28556	Oct. 13th 6:10 a. m.,
MP	" "	Frisco	" "
"	" "	MP	" "
26513	" "	6346	" "
CNO	" "	CNOTP	" "
6346	" "	UTL	" "
ATL	" "	11034	" "
11034	" "	MP	" "
MP	" "	33841	" "
33841	" "	WAB	" "
WAB	" "	72683	" "
72683	" "	72683	" "

State of Arkansas.

Terminal Handling of Loaded Cars on Through Trains, October, 1907.

Into Van Buren.		Out of Van Buren.	
10/21/07 12:15 p.m.	Train Ex. 413.	10/21/07 6:00 p. m.	Train Ex. 1802.
SRL	7290	Out 10/21/07 6:00 p. m., Train Ex. 1802.	
IM&S	12988	"	"
SAL	16346	"	"
CM&StP	41806	"	"
MP	38840	"	"
T&P	14657	"	"
CRi&P	61058	"	"
MI&T	33235	"	"
IM&S	12245	"	"
MP	34484	"	"
SP	88627	"	"
IM&S	19756	"	"
CofNJ	10089	"	"
MP	26843	"	"
MC	15176	"	"
MDT	15051	"	"
NCL	4619	"	"
MP	27212	"	"
AT&SF	29170	"	"
StLSW	6798	"	"

T&P	14992	"	"	"	"	"	"
MP	19828	"	"	"	"	"	"
"	5811	"	"	"	"	"	"
"	35461	"	"	"	"	"	"
	24	18					
5688	* Not out of Van Buren October 21st. St. Louis, Iron Mountain & Southern Railway Company. State of Arkansas.						

Terminal Handling of Loaded Cars on Through Trains, October, 1907.

Into McGehee.		Out of McGehee.					
10/2/07 11:30 a. m.		Oct. 10/3/07 10:00 a. m., Train # 182.					
Train #2-182.							
IM	9671	Oct.	10/3/07	10:00 a. m.,	Train # 182.		
DI&W	37360	"	"	"	"	"	"
IM	11352	*					
MP	22047	"	"	"	"	"	"
"	16783	"	"	"	"	"	"
"	35075	"	"	"	"	"	"
"	12379	"	"	"	"	"	"
KCFS&M	17880	"	"	"	"	"	"
SW	10016	"	"	"	"	"	"
IM	12736	"	"	"	"	"	"
MP	37137	"	"	"	"	"	"

"	13740	"	"
IM	11821	"	"
PCO	286201	"	"
MP	24699	"	"
B&O	72950	"	"
ACL	30925	"	"
MP	60406	"	"
CB&Q	27449	"	"
CB	2241	"	"
KCS	13430	"	"
MP	16824	"	"
GRI	1121	"	"
C&A	17728	"	"
C&O	11877	"	"
CM&StP	33868	"	"
MP	22081	"	"
C&A	17796	"	"
N&W	20942	"	"
DW	80062	"	"
M&O	3646	"	"
WAB	59868	"	"
TCSD	22450	"	"
MP	37207	"	"
PCO	19005	"	"
SOU	36197	"	"
MP	30842	"	"
CB&Q	20935	"	"
IM	20289	"	"
TBV	1310	"	"
MP	1004	"	"

"	15374	"	"	"	"	"	"
"	28116	"	"	"	"	"	"
"	62119	"	"	"	"	"	"
NYCH	16445	"	"	"	"	"	"
BCR	6	"	"	"	"	"	"
NONE	11823	"	"	"	"	"	"
MC	46393	"	"	"	"	"	"
IM	12743	"	"	"	"	"	"
laC	2024	"	"	"	"	"	"
IM	13064	"	"	"	"	"	"
MP	25800	"	"	"	"	"	"

52 51

* Not out of McGehee Train 182 Oct. 8nd.

5689-5721

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Terminal Handling of Loaded Cars on Through Trains, October, 1907.

Into Wynne.		Out of Wynne.	
10/5/07.			
Train #	1st 279-372.		
IM	15778	Oct. 10/6/07 11:05 a. m., Train Ex. 836.	"
DS&LA	3766	"	"
MP	25875	"	"
ART	7171	*	"
L&N	6120	"	"
MP	30814	*	"
URT	10620	*	"
CNOTP	6326	Oct. 10/6/07 4:00 a. m., Train Ex. 837.	"
L&N	93524	"	"
StLSF	30890	"	"
CR&P	57582	"	"
CB&Q	101147	"	"
Frisco	30685	"	"
"	7898	"	"
C&EI	37427	"	"
GTP	302197	"	"
C&EI	60375	"	"
IC	29821	"	"
IC	29593	"	"
EL	63031	"	"

IC	39656	"	"	"	"	"	"	"	"
IM	9711	"	"	"	"	"	"	"	"
HLSW	15066	"	"	"	"	"	"	"	"
IC	22176	"	"	"	"	"	"	"	"
PMcKy	20383	"	"	"	"	"	"	"	"
C&NW	100006	"	"	"	"	"	"	"	"
MP	35816	"	"	"	"	"	"	"	"
StLSW	21354	"	"	"	"	"	"	"	"
IC	22631	"	"	"	"	"	"	"	"
StLSW	12058	"	"	"	"	"	"	"	"
N&W	62985	"	"	"	"	"	"	"	"
L&N	4372	"	"	"	"	"	"	"	"

32 29

* Not out of Wynne Oct. 6th.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, By W. Presley Feild, D. C.

EXHIBIT FIFTY-FOUR.

EXHIBIT No. 54.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Intrastate Freight Traffic, State of Arkansas.

Period.	Number of ton miles.	Revenue received.	Revenue at inhibited rates.	Increase in revenue at in- hibited rates.	Per cent of increase in revenue.	Revenue received per ton mile. (Mills.)	Revenue per ton mile at inhibited rates. (Mills.)
1907	6,854,704	\$30,063.20	.....	.....	.....	13.14	.....
July,	8,013,508	107,326.19	.....	.....	.....	13.39	.....
August,	8,128,961	107,608.37	.....	.....	.....	13.24	.....
September,	9,622,508	131,286.45	.....	.....	.....	13.64	.....
October,	8,263,644	107,528.30	.....	.....	.....	13.11	.....
November,	7,036,944	96,405.66	.....	.....	.....	13.70	.....
December,	47,800,299	\$640,248.17	.....	.....	.....	13.38	.....
Total.....	6,195,674	\$136,294.11	\$94,023.07	\$42,271.04	45.0	22.00	15.17
December, 1908,	5,152,661	111,452.48	77,358.72	34,093.76	44.1	21.63	15.01
January, 1909,	5,292,139	110,253.47	76,402.98	33,790.49	44.	20.83	14.45
February,	5,430,546	109,972.15	76,784.40	33,187.75	43.2	20.25	14.14
March,	4,357,367	89,258.40	62,332.12	26,926.28	43.2	20.48	14.30
April,	3,980,971	80,154.77	56,363.13	23,791.64	42.2	20.09	14.13
May,	30,418,358	\$637,385.38	\$443,324.42	\$194,060.96	43.8	20.95	14.57
Total.....	4,102,084	\$70,965.40	\$55,788.41	\$15,176.99	27.2	17.30	13.60
June, 1909,	5,588,923	90,171.28	72,050.26	18,121.02	25.2	16.13	12.89
July,	6,930,277	108,671.10	87,932.18	20,738.92	23.6	15.68	12.69
August,	6,854,940	117,384.17	93,398.33	23,985.84	25.7	17.12	13.62
September,	8,401,920	151,914.70	119,330.90	32,583.80	27.3	18.08	14.20
October,	9,324,868	155,190.34	121,985.91	33,204.43	27.2	16.64	13.08
November,	41,203,012	\$694,296.99	\$550,485.99	\$143,811.00	26.12	16.85	13.36
Total.....							

NOTE.—Freight rates prior to November 2nd, 1908, were those of the Arkansas Commission; From November 2nd, 1908, to June 1st, 1909, the Company's tariff: Subsequent to June 1, 1909, the Court Tariff.

Average Revenue per ton mile, " "	Six Months, ending December 31, 1907.....	13.38 mills
" " " "	January, 1909	21.63 "
Average Revenue per ton mile, " "	Per cent of Increase over 1907.....	61.7%
" " " "	January, 1909, under Commission Tariff.....	15.01 mills
Average Revenue per ton mile, " "	Per cent of Increase over 1907.....	44.1%
" " " "	Per cent of Increase January, 1909, under Commission Tariff over 1907.....	12.2%
" " " "	Per cent of Increase January, 1909, under Court Tariff.....	16.85 mills
" " " "	Per cent of Increase January, 1909, under Court Tariff.....	13.36 "
" " " "	Per cent of Increase in 1909 over Commission Tariff.....	26.1%
" " " "	Per cent of Increase in 1909 over Commission Tariff over 1907.....	nothing.

Endorsed: Filed June 8th, 1910. W. P. Feldt, Clerk. By W. Presley, Feldt, D. C.

EXHIBIT FIFTY-FIVE.

5724

EXHIBIT No. 55.

5725

St. Louis, Iron Mountain & Southern Railway Company.

Results of Operation in Intrastate Traffic in Arkansas for Six Months Ending December 31, 1907, Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al. (170 Federal Reporter, 725).

	Total operating expenses.	Freight operating expenses.
Transportation and Hire of Equipment.....	\$2,404,802.34	\$1,755,255.76
Maintenance of Way.....	\$1,054,676.51	\$553,395.11
Maintenance of Equipment.....	1,035,566.07	723,431.33
Traffic	142,010.50	88,734.42
General Expenses	292,985.43	132,218.24
Dining Car Service—Bal.....	1,183.90	.....
Total.....	2,526,422.41	1,497,779.10
	\$4,931,224.75	\$3,253,034.86
Transportation Expense to Earnings.....	36.03%	35.85%
Other Operating Expense to Earnings.....	37.85%	30.59%
Total Expense to Earnings.....	73.88%	66.44%

The Transportation cost of the total Traffic is 100.50% of the Transportation cost of the freight traffic.
 The Transportation cost per ton per mile is \$1,755,255.76 ÷ 660,163,995, or \$0.0026588+. This figure multiplied by 100.5 is equal to \$0.0026721 and represents the average cost of hauling one ton of freight one mile, and

this figure multiplied by three is equal to \$0.008016 and represents the transportation cost of intrastate traffic per ton per mile.

The total number of ton miles of Intrastate freight was 47,860,299. Multiplying the average cost per ton mile (\$0.008016) by the ton miles results in a charge of \$383,648.16.

The average cost per ton mile for other operating Expenses is \$1,497,779.10 ÷ 660,163,995, or \$0.022688. Multiplying this amount by the number of ton miles of state freight results in a charge of \$105,585.45 for state traffic.

Recapitulation.

Total revenue from Intrastate traffic, including Miscellaneous	\$656,717.58
Transportation Expenses	\$383,648.16
Other Operating Expenses	108,585.45
Taxes and Rentals	24,007.96
	<hr/>
	516,241.57
Net earnings, Intrastate freight	\$140,476.01
Net earnings, intrastate passenger, as shown in Exhibit 3 on straight revenue basis	16,698.16
	<hr/>
Total net earnings, intrastate traffic	\$157,174.17
Per cent of return on 1907 valuation of property	3.51%
Per cent of return on 1909 valuation of property	2.92%

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT FIFTY-SIX.

EXHIBIT NO. 56.

St. Louis, Iron Mountain & Southern Railway.

State of Arkansas.

Statement Showing the Results of Operation on the St. L. I. M. & S. Ry. in the State of Arkansas for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibits "J," "K," "N," "O," and "Y," with Certain Revisions.—Freight Service.

1. Maintenance of Equipment.

(a) Locomotives:

This account divided on the basis outlined in the State's exhibit is as follows:

Yard Locomotive mileage.....	130,150		
50% added for extra repairs.....	65,075	195,225	37.64%
Local Locomotive mileage.....	70,583		
75% added for extra mileage and repairs.....	52,937	123,520	23.81
		199,981	38.55
Through Locomotive Mileage.....		518,726	100.00%
Yard Service		Amount.	
Local Service		\$69,135.80	
Through Service		43,733.35	
		70,807.25	
Total.....		\$183,676.40	

5726

5727

The expense of Maintenance of Yard Locomotives (\$69,135.80) divided between state and interstate on the basis of the number of tons handled in the month of October, 1907, as shown in Exhibit No. 26, is as follows:

	Percentage.	Amount.
Intrastate	21.15%	\$14,622.22
Interstate (including transstate)	78.85	54,513.58
Total	100.00	\$69,135.80

(b) Freight Cars:

The cost of repairs to freight cars divided on the basis used by the state, with the percentages revised to agree with the testimony of Mr. W. H. V. Rosing (page 235) is as follows:

Stopping and Starting	32%	\$152,926.60
Terminal Handling	23	109,916.00
Other Expenses	45	215,053.04
Total	100	\$477,895.64

Dividing each of the sub-divisions shown above on the basis adopted by the State and using other percentages, results in the following charge to Local and Through trains:

	Local.	Through.	Total.
Stopping and starting expenses:			
Car Miles	1,173,350	6,532,646	7,705,996
Same, with local car miles multiplied by eight	9,386,800	6,532,646	15,919,446
Percentage of each	58.96%	41.04%	100.00%
Expenses—Divided on above percentages	\$90,165.52	\$62,761.08	\$152,926.60

Terminal handling:

Car Miles as above.....	1,173,350	6,532,646	7,705,996
Same, with local car miles multiplied by two.....	2,346,700	6,532,646	8,879,346
Percentage of each.....	26.43%	73.57%	100.00%
Expenses—Divided on above percentages.....	\$29,050.80	\$80,865.20	\$109,916.00

The balance of the expenses of freight car maintenance, is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

5728	Local.	Through.	Total.
Car Miles	1,173,350	6,532,646	7,705,996
Percentage of each.....	15.22%	84.78%	100.00%
Expenses—Divided on above percentages.....	\$32,731.07	\$182,321.97	\$215,053.04

The total cost of repairs to freight cars divided between local and through trains as shown above, is as follows:

Stopping and Starting.....	Local.	Through.	Total.
Terminal Handling	\$90,165.52	\$62,761.08	\$152,926.60
Other Expenses	29,050.80	80,865.20	109,916.00
	32,731.07	182,321.97	215,053.04
Total.....	\$151,947.39	\$325,948.25	\$477,895.64

(c) Supervision and General:

The total expenses under this head divided between local and through service and Intrastate and Interstate traffic on the basis of the direct charges as shown above, are as follows:

	Direct charges.	Percentage.	Expenses.
Local trains	\$195,680.74	29.58%	\$18,297.98
Through trains	396,755.50	59.97	37,097.01
Intrastate	14,622.22	2.21	1,367.09
Interstate	54,513.58	8.24	5,097.21
Total.....	\$661,572.04	100.00	\$61,859.29

2. Traffic Expenses.

These expenses divided on the basis used by the State are as follows:

	Freight revenue.	Percentage.	Amount.
Intrastate	\$640,248.17	13.41%	\$11,899.29
Interstate	4,133,210.33	86.59	76,835.13
Total.....	\$4,773,458.50	100.00	\$88,734.42

3. Transportation Expenses.

(a) Station Expenses:

This expense divided between Intrastate and Interstate traffic on the basis of the number of tons handled, assuming that each intrastate ton has two station handlings and 90% of the interstate tons has one and 10% has two station handlings, is as follows:

	Intrastate.	Interstate.	Total.
Tons handled.....	684,122	1,571,713	2,255,835
Intrastate tons doubled to provide for two charges.....	684,122	.....	684,122
10% added to Interstate tons to provide for two charges...	.....	157,171	157,171
Total.....	\$1,368,244 44.18%	\$1,728,884 55.82%	\$3,097,128 100.00%
Station expenses divided on above percentages, are.....	\$103,216.38	\$130,410.56	\$233,626.94

(b) Yard and Terminal Expenses:

These expenses divided between state and interstate traffic on the basis of the number of tons handled, as explained under the head of Maintenance of Yard Locomotives (1a.), is as follows:

	Percentage.	Amount.
Intrastate	21.15%	\$62,042.99
Interstate (including transstate).....	78.85	231,304.50
Total	100.00	\$293,347.49

5729 (c) Fuel and Locomotive Expenses:

These expenses, divided on the basis outlined in the State's exhibits, are as follows:

	Local.	Through.	Total.
Engine Miles	70,583	199,981	270,564
Add $3\frac{1}{2}\%$ to local engine miles to equalize fuel consumption	2,470	.....	2,470
Total	73,053	199,981	273,034
Percentage of each	26.76%	73.24%	100.00%
Expenses divided on above percentages	\$59,301.61	\$162,303.79	\$221,605.40

(d) Enginehouse expenses—Road:

This expense divided on the basis used by the State is as follows:

	Local.	Through.	Total.
Total Engine Miles	70,583	199,981	270,564
12% added to Local Engine Miles to cover extra expenses.	8,470	.....	8,470
Total	79,053	199,981	279,034
Percentage of each	28.33%	71.67%	100.00%
Expenses divided on above percentages	\$15,194.55	\$38,439.58	\$53,634.13

(e) Road Enginenen and Trainmen:

This expense is divided on the basis outlined in the State's exhibit "K" and is as follows:

	Local.	Through.	Total.
Total amount, October, 1907.....	\$29,229.30	\$53,162.56	\$82,391.86
Percentage of each.....	35.47%	64.53%	100.00%
Expenses divided on above percentages.....	\$165,866.65	\$301,758.52	\$467,625.17

(f) Other Train Expenses:

This expense divided on the basis outlined by the State is as follows:

	Local.	Through.	Total.
Train Miles	70,583	196,512	267,095
Percentage of each	26.42%	73.58%	100.00%
Expenses divided on above percentages.....	\$34,957.06	\$97,355.81	\$132,312.87

(g) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1907, as adopted by the State, and are as follows:

	Intrastate.	Interstate.	Total.
Claims Paid	\$4,840.10	\$15,087.48	\$19,927.58
Percentage of each.....	24.29%	75.71%	100.00%
Expenses divided on above percentages.....	\$30,972.03	\$96,537.35	\$127,509.38

(h) Supervision and General:

These expenses divided between local, through, intrastate and interstate business on the basis of the direct charges to each of these classes, are as follows:

5730

	Direct expenses.	Percentage.	Amount.
Local Trains	\$275,319.87	18.00%	\$8,352.53
Through Trains	599,857.70	39.21	18,194.58
Intrastate Traffic	196,231.40	12.83	5,953.49
Interstate Traffic	458,252.41	29.96	13,902.32
Total	\$1,529,661.38	100.00	\$46,402.92

4. Maintenance of Way & Structures.

5. General Expenses.

These expenses have no direct relation to any particular class of service nor to any other item of expense, if they are to be considered what the State's witnesses term "Overhead Expenses," then, following their plan, they should be divided between local, through, and intrastate and interstate business on the basis of the charges for all other expenses of these classes, and the result is as follows:

	Direct expenses.	Percentages.	Maint. of way & struct.	General expenses.
Local Trains	\$497,651.12	20.84	\$115,327.54	\$27,554.28
Through Trains	1,051,904.79	44.05	243,770.55	58,242.13
Intrastate Traffic	230,073.49	9.63	53,291.95	12,732.62
Interstate Traffic	608,600.65	25.48	141,005.07	33,689.21
Total	\$2,388,230.05	100.00	\$553,395.11	\$132,218.24

6. Total Train Costs.

The total cost of local and through trains divided between intrastate and interstate freight on the basis of the ton miles of each class of freight on each class of trains, as shown in the State's Exhibit "I," is as follows:

Local Trains:		Percentages.	Amount.
Intrastate		28.51%	\$182,615.94
Interstate		71.49	457,917.00
Total		100.00	\$640,532.94
Through Trains:			
Intrastate		5.59	\$75,683.99
Interstate		94.41	1,278,233.48
Total		100.00	\$1,353,917.47

7. Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment and Value of Property.

These expenses divided between state and interstate on the basis adopted by the state and by the railroad company in its exhibits, are as follows:

	Intrastate.	Interstate.	Total.
Freight Revenue	\$640,248.17	\$4,133,210.33	\$4,773,458.50
Percentage of each	13.41%	86.59%	100.00%
Division on these percentages:			
Miscellaneous Revenue	\$16,469.41	\$106,345.00	\$122,814.41
Taxes	21,851.02	141,094.67	162,945.69
Rentals	2,156.94	13,927.62	16,084.56
Hire of Equipment	24,029.57	155,161.89	179,191.46
Assessed Value of Property Doubled (1907)	\$1,966,586.20	\$12,698,486.15	\$14,665,072.35
Assessed Value of Property Doubled (1909)	\$2,367,859.44	\$15,289,556.23	\$17,657,415.67

EXHIBIT No. —.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Statement of Freight Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Local and Through Trains and between State and Interstate Traffic on the Bases Outlined in Exhibit —.

	Train Costs.		Other Costs.		Local.
	Local.	Through.	Intrastate.	Interstate.	
1. Maintenance of Equipment:					
(a) Locomotives:					
(1) Yard .....	.....	.....	\$14,622.22	\$54,513.58	\$69,135.80
(2) Road	\$43,733.35	\$70,807.25	.....	.....	114,540.60
(b) Freight Cars	151,947.39	325,948.25	.....	.....	477,895.64
(c) Supervision and General	18,297.98	37,097.01	1,307.00	5,097.21	61,859.29
Total Maintenance of Equipment	\$213,978.72	\$433,852.51	\$15,989.31	\$59,610.79	\$723,431.33
2. Traffic Expenses .....	.....	.....	\$11,839.29	\$76,835.13	\$88,734.42
3. Transportation Expenses:					
(a) Station Expenses .....	.....	.....	\$103,216.38	\$130,410.56	\$233,626.94
(b) Yard and Terminal Expenses .....	.....	.....	62,042.99	231,304.50	293,347.49
(c) Fuel and Locomotive Expenses	\$59,301.61	\$162,303.79	.....	.....	221,605.40
(d) Enginehouse Expenses	15,194.55	38,439.58	.....	.....	53,634.13
(e) Road Enginemen and Trainmen	105,866.65	301,758.52	.....	.....	467,625.17
(f) Other Train Expenses	34,957.06	97,355.81	.....	.....	132,312.87
(g) Loss and Damage—Freight .....	.....	.....	30,972.03	96,537.35	127,509.38
(h) Supervision and General	8,352.53	18,194.58	5,953.49	13,902.32	46,402.92
Total Transportation Expenses	\$283,672.40	\$618,052.28	\$202,184.89	\$472,154.73	\$1,576,064.30
4. Maintenance of Way & Structures	\$115,327.54	\$243,770.55	\$53,291.97	\$141,006.07	\$553,396.11

5. General Expenses	\$27,554.28	\$58,242.13	\$12,732.02	\$33,689.21	\$132,218.24
6. Total Operating Expenses.....	<u>\$640,532.94</u>	<u>\$1,353,917.47</u>	<u>\$290,098.06</u>	<u>\$783,294.93</u>	<u>\$3,073,843.40</u>
7. Division of train costs between Intrastate and Interstate Business:					
(a) Local Trains:					
(1) Intrastate Freight 28.51%.....	*\$182,615.94	.....	\$182,615.94	.....	.....
(2) Interstate Freight 71.49%.....	*\$457,917.00	.....	.....	\$457,917.00	.....
(b) Through Trains:					
(1) Intrastate Freight 5.59%.....	.....	*\$75,083.99	\$75,083.99	.....	.....
(2) Interstate Freight 94.41%.....	.....	*1,278,233.48	.....	\$1,278,233.48	.....
8. Total Cost of Intrastate and Interstate Business .....	.....	.....	\$554,397.99	\$2,519,445.41	\$3,073,843.40

[* Figures in red ink.]

5732

EXHIBIT —.

St. Louis, Iron Mountain & Southern Railway.

State of Arkansas.

Statement Showing the Results of Operation on the St. L., I. M. & S. Ry. in the State of Arkansas for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibits "L," "M," "N," and "O" with Certain Revisions.—Passenger Service.

1. Maintenance of Equipment.

(a) Locomotives:

These expenses divided on a car mile basis, are as follows:

	Car miles.	Percentages.	Expenses.
Coach	785,703	59.38%	\$98,844.90
Pullman	279,878	21.15%	35,206.63
Mail	148,194	11.20%	18,643.70
Express	109,496	8.27%	13,766.38
Total.....	1,323,271	100.00	\$166,461.61

(b) Passenger Train Cars:

This expense is divided between each class of service on the basis of the car miles, with various allowances on the basis of the testimony of Mr. W. H. V. Rosing. Page 243.

	Car miles.	Percentages.	Expenses.
Coach	622,271		
100% added for added cost.....	622,271	83.41%	\$72,649.40
Baggage	163,432		
Mail	148,194	10.10	8,797.01
15% added for added cost.....	22,229	6.49	5,652.74
Express	109,496		
Total.....	1,687,893	100.00	\$87,099.15

(c) Supervision and General:

Expenses divided on the basis of the direct charges as shown above, are as follows:

	Direct charges.	Percentages.	Expenses.
Coach	\$171,494.30	67.63%	\$39,613.58
Pullman	35,206.63	13.89	8,135.93
Mail	27,440.71	10.82	6,337.70
Express	19,419.12	7.66	4,486.77
Total.....	\$253,560.76	100.00	\$58,573.98

2. Traffic Expenses.

These expenses divided between intrastate and interstate traffic on the basis of the gross earnings of each class, are as follows:

	Gross earnings.	Percentages.	Expenses.
Intrastate	\$836,542.20	59.54%	\$31,720.58
Interstate	568,476.21	40.46	21,555.50
Total	\$1,405,018.41	100.00	\$53,276.08

3. Transportation Expenses.

(a) Station Expenses:

These expenses divided on the basis adopted by the state, are as follows:

	Intrastate.	Interstate.	Total.
Number of Passengers Handled during the six months ended December 31, 1907	1,444,540	257,950	1,702,490
Add 100% to Intrastate business to represent use of two terminals	1,444,540	.....	1,444,540
Total	2,889,080	257,950	3,147,030
Percentage of each	91.80%	8.20%	100.00%
Expenses ¹ Divided on above Percentages (after allowing \$2,325.00 as cost of handling the mails)	\$52,377.81	\$4,678.63	\$57,056.44

5733 (b) Yard & Train Expenses:

This expense divided on the basis adopted by the State is as follows:

	Percentages.	Expenses.
Coach	59.38%	\$326,037.62
Pullman	21.15	116,128.26
Mail	11.20	61,495.81
Express	8.27	45,408.07
Total.....	100.00	\$549,069.76

(c) Loss and Damage to Baggage:

This expense divided on the basis adopted by the State is as follows:

	Earnings.	Percentages.	Expenses.
Intrastate	\$836,542.20	59.54%	\$984.39
Interstate	568,476.21	40.46	668.92
Total.....	\$1,405,018.41	100.00	\$1,653.31

(d) Supervision and General:

These expenses are divided on the basis of the direct charges as apportioned above, the bases adopted by the State, and are as follows:

	Direct charges.	Percentages.	Expenses.
Coach	\$326,037.62	53.44%	\$21,630.41
Pullman	116,128.26	19.03	7,702.59
Intrastate	53,362.20	8.75	3,541.65
Interstate	5,347.55	0.88	356.19
Mail	63,820.81	10.46	4,233.80
Express	45,408.07	7.44	3,011.42
Total.....	\$610,104.51	100.00	\$40,476.06

4. Maintenance of Way & Structures.

This expense, having no direct relation to any particular class of traffic, can be fairly considered an overhead expense, and, adopting the State's basis for expenses of that nature, it is divided on the basis of the direct charges to each class, as follows:

	Direct charges.	Percentages.	Expenses.
Coach	\$558,775.91	55.00	\$275,704.77
Pullman	167,173.41	16.46	82,510.92
Intrastate	88,624.43	8.72	43,711.74
Interstate	27,259.24	2.68	13,434.34
Mail	101,833.02	10.02	50,228.40
Express	72,325.38	7.12	35,691.23
Total.....	\$1,015,991.39	100.00	\$501,281.40

5. General Expenses.

(a) This expense, less the amount paid to Train Auditors, is divided between each class of service on the basis of the direct charges to each class, as adopted by the State and is as follows:

	Percentages.	Expenses.
Coach	55.00%	\$63,742.27
Pullman	16.46	19,076.32
Intrastate	8.72	10,106.05
Interstate	2.68	3,105.99
Mail	10.02	11,612.68
Express	7.12	8,251.72
Total	100.00	\$115,895.03

5734

(b) The expenses of Train Auditors divided between intrastate and interstate service on the basis of the number of passengers handled, is as follows:

	Number of passengers.	Percentage.	Expense.
Intrastate	1,444,540	84.85%	\$38,074.03
Interstate	257,950	15.15	6,798.13
Total	1,702,490	100.00	\$44,872.16

6. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.

The cost of Coach Service, \$898,222.95, is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic handled in coaches, during the month of October, 1907, and is as follows:

	Passenger Miles.	Percentages.	Coach Service.
Intrastate	6,736,409	64.91%	\$583,036.52
Interstate	3,641,494	35.09	315,186.43
Total.....	<u>10,377,903</u>	<u>100.00</u>	<u>\$898,222.95</u>

The cost of Pullman service, \$268,760.65, is divided between intrastate and interstate business on the basis of the total passenger miles of each class of traffic handled in Pullman cars, during the month of October, 1907, and is as follows:

	Passenger Miles.	Percentages.	Pullman Service.
Intrastate	547,124	25.00%	\$67,190.16
Interstate	1,641,371	75.00	201,570.49
Total.....	<u>2,188,495</u>	<u>100.00</u>	<u>\$268,760.65</u>

7. Miscellaneous Revenue and Dining Car Deficit.

These expenses are divided between intrastate and interstate business on the gross earnings basis as adopted by the State, and are as follows:

	Gross earnings.	Percentage.	Miscellaneous revenue.	Dining car deficit.
Intrastate	\$836,543.20	59.54%	\$22,170.87	\$704.89
Interstate	568,476.21	40.46	15,066.07	479.01
Total.....	<u>\$1,405,018.41</u>	<u>100.00</u>	<u>\$37,236.94</u>	<u>\$1,183.90</u>

8. Taxes, Rentals, Hire of Equipment and Value of Property.

These expenses are divided on the basis adopted by the State and are as follows:

	Total earnings.	Percentage.	Taxes.	Rentals.	Hire of Equipment.
Intrastate	\$858,713.07	48.28%	\$28,582.96	\$2,821.46	\$499.21†
Interstate	583,542.28	32.80	19,418.42	1,916.81	339.15†
Mail	202,637.71	11.39	6,743.16	665.63	117.77†
Express	133,910.82	7.53	4,457.95	440.05	77.86†
Total	\$1,778,803.88	100.00	\$59,202.49	\$5,843.95	\$1,033.99†

[†In red ink in copy.]

	Value of property—1907.	Value of property—1909.
Intrastate	\$2,572,459.62	\$3,097,358.66
Interstate	1,747,652.76	2,104,253.60
Mail	606,883.08	730,714.90
Express	401,214.19	483,080.17
Total	\$5,328,209.65	\$6,415,407.33

NOTE.—The records of the Company for the month of October, 1907, show the total number of passenger miles to be,

Intrastate	7,283,533
Interstate	5,282,865
Total	12,566,398

The Company's records also show that in October, 1907, there were 2,188,495 passenger miles, carried in Pullman Cars; on the State's assumption that 25% of the Pullman Car passenger miles is intrastate traffic, the division of passenger miles for October, 1907, may be made as follows:

	Coach.	Pullman.	Total.
Intrastate	6,736,409	547,124	7,283,533
Interstate	3,641,494	1,641,371	5,282,865
Total.....	<u>10,377,903</u>	<u>2,188,495</u>	<u>12,566,398</u>

(Here follow pasters, marked pp. 5735 and 5736.)

EXHIBIT No. —.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Statement of Passenger Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Each Class of Business on the Bases Outlined in Exhibit No. —.

	Car Costs.		Other Costs.		Car and Other Costs.		Total.
	Coach.	Pullman.	Intrastate.	Interstate.	Mail.	Express.	
1. Maintenance of Equipment:							
(a) Locomotives	\$98,844.90	\$35,206.63	.....	.....	\$18,643.70	\$13,766.38	\$166,461.61
(b) Passenger Train Cars	72,649.40	.....	.....	.....	8,797.01	5,652.74	87,099.15
(c) Supervision and General	39,613.58	8,135.93	.....	.....	6,337.70	4,486.77	58,573.98
Total Maintenance of Equipment	\$211,107.88	\$43,342.56	.....	.....	\$33,778.41	\$23,905.89	\$312,134.74
2. Traffic Expenses .....	.....	.....	\$31,720.58	21,555.50	.....	.....	\$53,276.08
3. Transportation Expenses:							
(a) Station Expenses .....	.....	.....	\$52,377.81	\$4,678.63	\$2,325.00	.....	\$59,381.44
(b) Yard & Train Expenses	\$326,037.62	\$116,128.26	.....	.....	61,495.81	\$45,408.07	549,069.76
(c) Loss & Damage to Baggage .....	.....	.....	984.39	688.92	.....	.....	1,653.31
(d) Supervision and General	21,630.41	7,702.59	3,541.65	356.19	4,233.80	3,011.42	40,476.06
Total Transportation Expenses	\$347,668.03	\$123,830.85	\$56,903.85	\$5,703.74	\$68,074.61	\$48,419.49	\$650,580.57
4. Maintenance of Way & Structures	\$275,704.77	\$82,510.92	\$43,711.74	\$13,434.34	\$50,228.40	\$35,691.23	\$501,281.40
5. General Expenses:							
(a) General Expenses	\$63,742.27	\$19,076.32	\$10,106.05	\$3,105.99	\$11,612.68	\$8,251.72	\$115,895.03
(b) Train Auditors .....	.....	.....	38,074.03	6,798.13	.....	.....	44,872.16
Total General Expenses	\$63,742.27	\$19,076.32	\$48,180.08	\$9,904.12	\$11,612.68	\$8,251.72	\$160,767.19
6. Total Operating Expenses	\$898,222.95	\$268,760.65	\$180,516.25	\$50,597.70	\$163,674.10	\$116,268.33	\$1,678,039.98
7. Division of Coach and Pullman Expense Between Intrastate and Interstate Business:							
(a) Coach:							
(1) Intrastate 64.91%	*\$583,036.52	.....	\$583,036.52	.....	.....	.....	.....
(2) Interstate 35.09%	*315,186.43	.....	.....	\$315,186.43	.....	.....	.....
(b) Pullman:							
(1) Intrastate 25.00% .....	.....	*\$67,190.16	\$67,190.16	.....	.....	.....	.....
(2) Interstate 75.00% .....	.....	\$201,570.49	.....	\$201,570.49	.....	.....	.....
8. Total Cost of Intrastate, Interstate, Mail, and Express Business .....	.....	.....	\$830,742.93	\$567,354.62	\$163,674.10	\$116,268.33	\$1,678,039.98

[* Figures in red ink.]

EXHIBIT No. —.

St. Louis, Iron Mountain & Southern Railway Company.

State of Arkansas.

Statement of Revenue, Expenses and Net Earnings in the State of Arkansas for the Six Months Ended December 31, 1907, Divided Between the Various Classes of Business on the Bases Outlined in Exhibits — and —.

	Freight.			Passenger.					Total Intrastate.	Total Interstate.	Total Business.
	Intrastate.	Interstate.	Total.	Intrastate.	Interstate.	Mail.	Express.	Total.			
1. Revenue:											
(a) Freight, Passenger, Mail and Express.....	\$640,248.17	\$4,133,210.33	\$4,773,458.50	\$836,542.20	\$568,476.21	\$202,637.71	\$133,910.82	\$1,741,566.94	\$1,476,790.37	\$4,701,686.54	\$6,515,025.44
(b) Miscellaneous	16,469.41	106,345.00	122,814.41	22,170.87	15,066.07	.....	.....	37,236.94	38,640.28	121,411.07	160,051.35
Total Revenue	\$656,717.58	\$4,239,555.33	\$4,896,272.91	\$858,713.07	\$583,542.28	\$202,637.71	\$133,910.82	\$1,778,803.88	\$1,515,430.65	\$4,823,097.61	\$6,675,076.79
2. Expenses:											
(a) Operating Expenses	\$554,397.90	\$2,519,445.41	\$3,073,843.40	\$830,742.93	\$567,354.62	\$163,674.10	\$116,268.33	\$1,678,039.98	\$1,385,140.92	\$3,086,800.03	\$4,751,883.38
(b) Taxes	21,851.02	141,094.67	162,945.69	28,582.96	19,418.42	6,743.16	4,457.95	59,202.49	50,433.98	160,513.09	222,148.18
(c) Rentals	2,156.94	13,927.62	16,084.56	2,821.46	1,916.81	667.63	440.05	5,843.95	4,978.40	15,844.43	21,928.51
(d) Hire of Equipment.....	24,029.57	155,161.89	179,191.46	*499.21	*339.15	*117.77	*77.86	*1,033.90	23,530.36	154,822.74	178,157.47
(e) Dining Car Deficit.....	.....	.....	.....	704.89	479.01	.....	.....	1,183.90	704.89	479.01	1,183.90
Total Expenses	\$602,437.52	\$2,829,629.59	\$3,432,065.11	\$862,353.03	\$588,829.71	\$170,965.12	\$121,088.47	\$1,743,236.33	\$1,464,788.55	\$3,418,459.30	\$5,157,301.44
3. Net Earnings	\$54,282.06	\$1,409,925.74	\$1,464,207.80	*\$3,639.96	*\$5,287.43	\$31,672.59	\$12,822.35	\$35,567.55	\$50,642.10	\$1,404,638.31	\$1,499,775.35
4. Assessed Value of the Property,—Doubled—1907.....	1,966,586.20	\$12,698,486.15	\$14,665,072.35	\$2,572,459.62	\$1,747,652.76	\$606,883.08	\$401,214.19	\$5,328,209.65	\$4,539,045.82	\$14,446,138.91	\$19,993,282.00
Percentage of Net Earnings to Valuation.....	2.76%	11.10%	9.98%	*0.14%	*0.30%	5.22%	3.20%	0.67%	1.12%	9.72%	7.50%
5. Assessed Value of the Property,—Doubled—1909.....	2,367,859.44	\$15,289,556.23	\$17,657,415.67	\$3,097,358.66	\$2,104,253.60	\$730,714.90	\$483,080.17	\$6,415,407.33	\$5,465,218.10	\$17,393,809.83	\$24,072,823.00
Percentage of Net Earnings to Valuation.....	2.20%	9.22%	8.29%	*0.12%	*0.25%	4.33%	2.65%	0.55%	0.93%	8.08%	6.23%

[* Figures in red ink.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT FIFTY-SIX-A.

EXHIBIT No. 56-A.

St. Louis, Iron Mountain & Southern Ry. Co.

State of Arkansas.

Statement Showing the Results of Operation on the St. L., I. M. & S. Ry., as Reported in Exhibit No. 56, After Certain Changes Have Been Made in the Passenger Miles Carried in Pullman Cars.

In making a check of the number of passenger miles carried in Pullman cars for the month of October, 1907, it was found that owing to duplications of certain passenger miles in the train auditors' reports, the passenger mileage in Pullman cars should be 1,936,121 instead of 2,188,495. This will result in the following changes in the figures shown in Exhibit No. 56.

	Passenger miles.		
	Coach.	Pullman.	Total.
Intrastate	6,799,503	484,030	7,283,533
Interstate	3,830,774	1,452,091	5,282,865
Total	10,630,277	1,936,121	12,566,398

The cost of Coach Service, \$898,222.95, divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic handled in coaches, during the month of October, 1907, is as follows:

	Passenger miles.	Percentage.	Coach service.
Intrastate	6,799,503	63.96	\$574,503.40
Interstate	3,830,774	36.04	323,719.55
Total	10,630,277	100.00	\$898,222.95

The cost of Pullman service, \$268,760.65, divided between intrastate and interstate business on the basis of the total passenger miles of each class of traffic handled in Pullman cars, during the month of October, 1907, is as follows:

	Passenger miles.	Percentage.	Coach service.
Intrastate	484,030	25.00	\$67,190.16
Interstate	1,452,091	75.00	201,570.49
Total.....	1,936,121	100.00	<u>\$268,760.65</u>

After applying these changes to the figures shown in Exhibit No. 56 the total passenger expense divided between each class of business is as follows:

Intrastate Passenger Expense.....	\$822,209.81
Interstate Passenger Expense.....	575,887.74
Mail Expense	163,674.10
Express Expense	116,268.33
Total.....	<u>\$1,678,039.98</u>

These changes applied to the last page of Exhibit No. 56 shows the following result:

	Net earnings.	Percentage of net earnings to 1907 valuation.	Percentage of net earnings to 1909 valuation.
Intrastate Frt.	\$54,282.06	2.76%	2.29%
Interstate "	1,409,925.74	11.10	9.22
Total Freight	\$1,464,207.80	9.98	8.29
Intrastate Pasgr.	4,893.16	0.19	0.16
Interstate "	13,820.55*	0.79*	0.66*
Mail	31,672.59	5.22	4.33
Express	12,822.35	3.20	2.65
Total Passenger	\$35,567.55	0.67	0.55
Total Intrastate	59,175.22	1.30	1.08
Total Interstate	1,396,105.19	9.66	8.03
Total Business	\$1,499,775.35	7.50	6.23

[*In red ink in copy.]

5739 Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT FIFTY-SEVEN.

EXHIBIT No. 57.

St. Louis, Iron Mountain & Southern Railway Company.
Statement of Passenger Traffic, State of Arkansas.

Period.	Intrastate.			Interstate.	
	Passenger miles	Passenger revenue.	Revenue at inhibited rates.	Passenger miles.	Passenger revenue.
July, 1907.....	7,423,162	\$145,999.19	.....	4,364,901	\$93,011.32
August, 1 ".....	7,444,054	146,161.32	.....	4,606,915	87,026.99
September, ".....	7,326,264	140,493.51	.....	5,288,855	101,820.05
October, ".....	7,283,533	138,271.49	.....	5,282,865	97,546.47
November, ".....	6,594,605	126,464.22	.....	5,819,868	105,004.80
December, ".....	7,415,287	141,944.63	.....	5,905,031	103,880.09
Total.....	43,486,905	\$839,334.36	.....	31,268,435	\$588,289.72
Less adjustments	130,909	2,792.16	.....	781,811	19,913.51
Total.....	43,355,996	\$836,542.20	.....	30,486,624	\$568,476.21
July, 1909.....	5,588,319	\$145,935.05	\$110,118.54	4,349,603	\$101,381.25
August, ".....	5,713,075	152,068.28	112,826.50	5,091,814	106,815.15
September, ".....	5,506,776	148,196.01	108,974.55	5,994,817	133,908.98
October, ".....	6,541,367	172,922.35	130,085.63	5,536,695	123,395.60
November, ".....	6,533,488	169,624.12	130,042.94	3,556,852	85,414.30
December, ".....	6,889,293	178,418.37	136,570.82	5,462,660	126,437.69
Total.....	36,772,318	\$967,164.18	\$728,618.98	29,992,441	\$677,352.97

5742

EXHIBIT FIFTY-EIGHT.

5743

EXHIBIT 58.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement Showing Revenue from State Freight and Passenger Traffic under Both Current and Inhibited Rates, for Fourteen Months Ending Dec. 31, 1909.

Month.	At Current Rates.	At Inhibited Rates.	Freight.	At Inhibited Rates.	Per Cent of Increase.
			(Railroad Tariff effective November 2, 1908.)		
November, 1908.....	\$38,167.87	\$28,711.67		\$9,456.20	32.94
December, ".....	38,426.49	25,789.74		12,636.75	49.00
January, 1909.....	30,916.26	20,863.89		10,052.37	48.18
February, ".....	38,256.55	26,394.30		11,862.25	44.94
March, ".....	41,098.24	27,187.76		13,910.48	51.16
April, ".....	33,853.75	22,338.46		11,515.29	51.55
May ".....	26,869.12	17,336.22		9,532.90	54.99
Total R. R. Tariff.....	\$247,588.28	\$168,622.04		\$78,966.24	46.83

(Court Tariff effective June 1, 1909.)

June, 1909.....	\$22,955.19	\$17,417.15	\$5,538.04	31.80
July, ".....	28,368.84	21,998.19	6,370.65	28.96
August, ".....	33,260.94	26,037.49	7,223.45	27.74
September, ".....	34,556.49	27,005.32	7,551.17	27.96
October, ".....	41,147.18	32,143.44	9,003.74	28.01
November, ".....	43,856.17	33,313.89	10,542.28	31.65
December, ".....	29,724.80	22,524.51	7,200.29	31.96
Total Crt. Tariff.....	\$233,869.61	\$180,439.99	\$53,429.62	29.61
Total 14 months.....	\$481,457.89	\$349,062.03	\$132,395.86	37.93

Passenger.

(3¢ Rate Effective October 19, 1908—Thirteen Days in Oct. Omitted.)				
November, 1908.....	\$50,714.01	\$37,207.61	\$13,506.40	36.30
December, ".....	62,262.90	45,226.64	17,036.26	37.67
January, 1909.....	42,271.64	30,774.85	11,496.79	37.36
February, ".....	39,519.43	28,985.94	10,533.49	36.24
March, ".....	44,369.60	32,665.26	11,704.34	35.83
April, ".....	41,468.23	30,515.44	10,952.79	35.89
May, ".....	42,125.58	31,391.03	10,734.55	34.20
June, ".....	40,962.46	30,062.50	10,899.96	36.26
July, ".....	46,650.31	34,115.32	12,534.99	36.74
August, ".....	48,531.87	34,830.00	13,701.87	39.34
September, ".....	45,828.38	32,980.72	12,847.66	38.96
October, ".....	54,792.67	39,960.68	14,831.99	37.12
November, ".....	55,466.68	39,984.26	15,482.42	38.72
December, ".....	59,045.50	42,547.87	16,497.63	38.77
Total	\$674,009.26	\$491,248.12	\$182,761.14	37.20

Summary Since Court-tariff June 1, 1909, to December 31, 1909.

Freight	\$233,869.61	\$180,439.99	\$53,429.62	29.61
Passenger	351,277.87	254,481.35	96,796.52	38.04
Total	\$585,147.48	\$434,921.34	\$150,226.14	34.54

Summary Entire Period.

Fr. R. R. Tariff	\$247,588.28	\$168,622.04	\$78,966.24	46.83
Fr. Court Tariff	233,869.61	180,439.99	53,429.62	29.61
Total Freight	\$481,457.89	\$349,062.03	\$132,395.86	37.93
Passenger	674,009.26	491,248.12	182,761.14	37.20
Grand Total...	\$1,155,467.15	\$840,310.15	\$315,157.00	37.50

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5744

EXHIBIT FIFTY-NINE.

5745

EXHIBIT No. 59.

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of All Loaded Trans-State Cars Moved Through the State of Arkansas for Fifteen Days (1st to 15th) in October, 1908, Showing Actual Time Consumed and Miles Made Within the State Compared with the Schedule.

Southbound.

From—	To—	Distance (miles).	No. cars.	Car miles.	Total number of hours in Arkansas.	Average number miles per hour including all stops en route.	Average schedule time (miles) per hour of freight trains, includ- ing all stops en route.	Average number hours per car in Arkansas.	Schedule time (hours) of freight trains.
St. Francis	Texarkana	349	433	151,117	12,207	12.4	13.3	28.2	25.6
St. Francis	Arkana	344	114	39,216	3,467	11.3	13.6	30.4	25.0
St. Francis	Stamps	315	40	12,600	1,076	11.7	13.4	26.9	22.8
Fair Oaks	Texarkana	246	120	29,520	2,288	12.9	13.8	19.1	17.8
Various	Various	Various	227	18,592	3,368	5.5	* . . .	14.8	* . . .
Total	.....	.....	934	251,045	22,406	11.2			

Northbound.									
Texarkana	St. Francis	349	290	101,210	17,894	5.7	12.4	61.7	28.1
Arkana	St. Francis	344	212	72,928	14,667	5.0	12.4	69.2	27.7
Stamps	St. Francis	315	102	32,130	6,103	5.3	12.5	59.8	25.3
Various	Various	Various	106	22,537	3,956	5.7	*	37.3	*
Total	. . . . .	. . . . .	710	228,805	42,620	5.4			
					Average all	7.4			

* Impracticable to show the schedule time on this item on account of cars moving between various junction points.

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5746

EXHIBIT SIXTY.

5747

EXHIBIT 60.

St. Louis Southwestern Railway Company.

State of Arkansas—Freight Service.

Statement Showing Results of Operating Freight Service in the State of Arkansas, for the Period of Six Months Ended December 31, 1907, on the Bases Outlined in the State's Exhibit "R," with Certain Revisions.

1—Maintenance of Equipment.

(a) Locomotives:

Divided on the basis adopted by the State is as follows:

	Mileage.	Percentages.	Expenses.
Yard Locomotive Mileage.....	7,507		
50% added for extra repairs	3,754	9.04%	\$5,377.98
Local Locomotive Mileage	25,797		
75% added for extra mileage and repairs.....	19,348	36.26%	21,571.40
Through Locomotive Mileage.....	68,118	54.70%	32,541.52
Total	124,524	100.00%	\$59,490.90

Yard.

The maintenance of yard locomotives (\$5,377.98) divided between Intrastate and Interstate on the basis of the number of tons handled (excluding trans-state tons), as shown in Exhibit "A," is as follows:

	Tons.	Percentages.	Amount.
Intrastate	19,013	25.34%	\$1,362.78
Interstate (excluding trans-state)	56,012	74.66%	4,015.20
Total	75,025	100.00%	\$5,377.98

(b) Freight Cars:

Divided on the basis adopted by the State and the percentages revised to agree with the testimony of Mr. W. H. V. Rosing (Page 235), is as follows:

	Percentages.	Expenses.
Stopping and Starting	32%	\$58,169.80
Terminal Handling	23%	41,809.54
Other Expenses	45%	81,801.28
Total	100%	\$181,780.62

5748

Starting and Stopping Expenses.

Terminal Handling.

Divided on the basis adopted by the State, except that local trains are charged eight times more than through trains in proportion to car-miles, instead of four times, to agree with the testimony of Mr. Frank Ward (Page 618), is as follows:

	Local.	Through.	Total.
Car-miles (October, 1908)	430,911	2,269,559	2,700,470
Same, with local multiplied by eight	3,447,288	2,269,559	5,716,847
Percentage of each	60.30%	39.70%	100.00%
Expenses divided as above	\$60,287.54	\$39,691.80	\$99,979.34

Other Expenses.

Divided on the basis adopted by the State is as follows:

	Local.	Through.	Total.
Car miles (October, 1908)	430,911	2,269,559	2,700,470
Percentage of each	15.96%	84.04%	100.00%
Expenses divided as above	\$13,055.48	\$68,745.80	\$81,801.28

Freight Cars—Summary.

	Local.	Through.	Total.
Stopping and Starting and Terminal Hdlg.	\$60,287.54	\$39,691.80	\$99,979.34
Other Expenses	13,055.48	68,745.80	81,801.28
Total	<u>\$73,343.02</u>	<u>\$108,437.60</u>	<u>\$181,780.62</u>

(c) Supervision and General:

Divided on the basis adopted by the State is as follows:

	Direct Charges.	Percentages.	Expenses.
Local Trains	\$94,914.42	39.34%	\$7,463.70
Through Trains	140,979.12	58.43	11,085.51
Intrastate	1,362.78	.57	108.14
Interstate	4,015.20	1.66	314.94
Total	<u>\$241,271.52</u>	<u>100.00%</u>	<u>\$18,972.29</u>

5749 2—Traffic Expenses.

Divided on the basis adopted by the State is as follows:

	Direct Revenue.	Percentages.	Expenses.
Intrastate	\$175,515.42	9.78%	\$5,849.70
Interstate	1,619,840.07	90.22%	53,963.18
Total	<u>\$1,795,355.49</u>	<u>100.00%</u>	<u>\$59,812.88</u>

3—Transportation Expenses.

(a) Station Expenses:

Divided on the basis adopted by the State in Exhibit "X" is as follows:

	Intrastate.	Interstate.	Total.
Total tons (excluding trans-state)	197,600	389,039	586,639
Double the intra-state tons	197,600	.....	197,600
Total	<u>395,200</u>	<u>389,039</u>	<u>784,239</u>
Percentage of each	50.39%	49.61%	100.00%
Expenses divided as above	\$23,944.68	\$23,574.04	\$47,518.72

(b) Yard and Terminal Expenses:

Divided between Intrastate and Interstate on basis of tons handled (trans-state excluded) the same as was done for Maintenance of Yard Locomotives (1-a), is as follows:

Expenses.
Intrastate
Interstate
Total

Percentages.
25.34%
74.66%
100.00%

Intrastate
Interstate
Total

(c) Fuel and Locomotive Expenses:

Divided on the basis adopted by the State is as follows:

Through.
71.85%
\$55,958.63
Total.
100.00%
\$77,882.58

Local
28.15%
\$21,923.95

Percentage of each
Expenses divided as above

5750 (d) Enginehouse Expenses—Road:

Divided on the basis adopted by the State is as follows:

Through.
56.90%
\$5,947.89
Total.
100.00%
\$10,453.24

Local.
43.10%
\$4,505.35

Percentage of each
Expenses divided as above

(e) Road Enginemen and Trainmen:

Divided on the basis adopted by the State is as follows:

Through.
60.15%
\$78,243.56
Total.
100.00%
\$130,080.73

Local.
39.85%
\$51,837.17

Percentage of each
Expenses divided as above

(f) Other Train Expenses:

Divided on the basis adopted by the State is as follows:

	Local.	Through.	Total.
Percentage of each	27.47%	72.53%	100.00%
Expenses divided as above	\$8,186.55	\$21,615.24	\$29,801.79

(g) Loss and Damage—Freight:

Divided on the basis adopted by the State is as follows:

	Intrastate.	Interstate.	Total.
Percentage of each	9.54%	90.46%	100.00%
Expenses divided as above	\$1,810.37	\$17,166.29	\$18,976.66

(h) Supervision and General:

Divided on the basis adopted by the State is as follows:

	Direct Charges.	Percentages.	Expenses.
Local Trains	\$86,453.02	23.29%	\$3,875.94
Through Trains	161,765.32	43.58%	7,252.61
Intrastate	40,063.39	10.80%	1,797.34
Interstate	82,897.41	22.33%	3,716.18
Total	\$371,179.14	100.00%	\$16,642.07

4. Maintenance of Way and Structures.

5. General Expenses.

These expenses have no direct relation to either Local, Through, Intrastate or Interstate. If they are to be considered what the State's witnesses term "Overhead Expenses," then they should, following the State's plan, be divided between the several classes on basis of the direct charges to each, as follows:

	Direct charges.	Percentages.	M. of W. & S.	General expenses.
Local Trains	\$192,707.08	27.22%	\$47,426.05	\$11,981.70
Through Trains	321,082.56	45.35%	79,014.37	19,962.16
Intrastate	49,181.35	6.95%	12,109.15	3,059.25
Interstate	144,906.91	20.48%	35,682.78	9,014.88
Total.....	\$707,877.90	100.00%	\$174,232.35	\$44,017.99

6. Total Train Costs.

Divided on the basis of intrastate and interstate ton-miles handled on local and through trains, as adopted by the State, using, however, the results for the month of October, 1908, as per State's Exhibit "P," is as follows:

Local Trains:		Percentages.	Expenses.
Intrastate		32.66%	\$74,443.57
Interstate		67.34%	153,491.43
Total.....		100.00%	\$227,935.00

Through Trains:

Intrastate	1.09%	\$4,842.44
Interstate	98.91%	439,418.30
Total.....	100.00%	<u>\$444,260.74</u>

7. Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, and Value of Property.

Divided on the revenue basis adopted by both this Company and the State is as follows:

	Intrastate.	Interstate.	Total.
Percentage of Freight Revenue.....	9.78%	90.22%	100.00%
Division on these percentages:			
Miscellaneous Revenue	\$2,450.97	\$22,610.05	\$25,061.02
Taxes	\$5,495.26	\$50,693.51	\$56,188.77
Rentals (Credits)	5,547.49*	51,175.32*	56,722.81*
Assessed value of property, 1908 doubled.....	\$1,076,548.28	\$9,931,102.56	\$11,007,650.84
Assessed value of property, 1909 doubled.....	\$1,364,345.27	\$12,586,015.34	\$13,950,360.61

[*In red ink in copy.]

St. Louis Southwestern Railway Company.

State of Arkansas.

Recapitulation of Freight Operating Expenses for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "Q," Revised on Bases Explained in Succeeding Exhibit.

1. Maintenance of Equipment:	Train costs.		Other costs.		
	Local. (1)	Through. (2)	Intrastate. (3)	Interstate. (4)	Total. (5)
(a) Locomotives:					
(1) Yard .....	.....	.....	\$1,362.78	\$4,015.20	\$5,377.98
(2) Road	\$21,571.40	\$32,541.52	.....	.....	54,112.92
(b) Freight Cars	73,343.02	108,437.60	.....	.....	181,780.62
(c) Supervision and General	7,463.70	11,085.51	108.14	314.94	18,972.29
Total Maintenance of Equipment.	\$102,378.12	\$152,064.63	\$1,470.92	\$4,330.14	\$260,243.81
2. Traffic Expenses .....	.....	.....	\$5,849.70	\$53,963.18	\$59,812.88
3. Transportation Expenses:					
(a) Station Expenses .....	.....	.....	\$23,944.68	\$23,574.04	\$47,518.72
(b) Yard and Terminal Expenses .....	.....	.....	14,308.34	42,157.08	56,465.42
(c) Fuel and Locomotive Expenses	\$21,923.95	\$55,958.63	.....	.....	77,882.58
(d) Enginehouse Expenses—Road	4,505.35	5,947.89	.....	.....	10,453.24
(e) Road Enginemen and Trainmen	51,837.17	78,243.56	.....	.....	130,080.73
(f) Other Train Expenses	8,186.55	21,615.24	.....	.....	29,801.79
(g) Loss and Damage—Freight .....	.....	.....	1,810.37	17,166.29	18,976.66
(h) Supervision and General	3,875.94	7,252.61	1,797.34	3,716.18	16,642.07
Total Transportation Expenses..	\$90,328.96	\$169,017.93	\$41,860.73	\$86,613.59	\$387,821.21

4. Maintenance of Way and Structures....	\$47,426.05	\$79,014.37	\$12,109.15	\$35,682.78	\$174,232.35
5. General Expenses	\$11,981.70	\$19,962.16	\$3,059.25	\$9,014.88	\$44,017.99
6. Total Train Costs and Other Operating Expenses	\$252,114.83	\$420,059.09	\$64,349.75	\$189,604.57	\$926,128.24
7. Division of Train Costs between Intrastate and Interstate Business on a Ton-Mile Basis:					
(a) Local Trains:					
(1) Intrastate Freight—32.66% of total	\$82,340.70†	.....	\$82,340.70	.....	.....
(2) Interstate Freight—67.34% of total	169,774.13†	.....	.....	\$169,774.13	.....
(b) Through Trains:					
(1) Intrastate Freight—1.09% of total .....	.....	\$4,578.64*	4,578.64	.....	.....
(2) Interstate Freight—98.91% of total .....	.....	415,480.45*	.....	415,480.45	.....
Total Cost of Intrastate and Interstate Business .....	.....	.....	\$151,269.09	\$774,859.15	\$926,128.24

[*In red ink in copy.]

St. Louis Southwestern Railway Company.

State of Arkansas—Passenger Service.

Statement Showing Results of Operating Passenger Service in the State of Arkansas, for the Period of Six Months Ended December 31, 1907, on the Basis Outlined in the State's Exhibit "T," with Certain Revisions.

1—Maintenance of Equipment.

(a) Locomotives:

Divided on the basis adopted by the State is as follows:

	Car-Miles.	Percentages.	Expenses.
Coach	221,159	64.73%	\$29,431.20
Pullman	59,334	17.37%	7,897.73
Mail	35,480	10.38%	4,719.54
Express	25,683	7.52%	3,419.17
Total	341,656	100.00%	\$45,467.64

(b) Passenger Train Cars:

Divided on the car-mile basis adopted by the State with various allowances, as per testimony of Mr. W. H. V. Rosing (Page 243), is as follows:

	Car-Miles.	Percentages.	Expenses.
Coach	182,460	85.86%	\$28,865.99
100% added for added cost	182,460		
Baggage	38,699		
Mail	35,480	8.68%	2,918.20
15% added for added cost	5,322		
Express	25,683	5.46%	1,835.65
Total	470,104	100.00%	\$33,619.84

(c) Supervision and General:

Divided on the basis adopted by the State is as follows:

	Direct Charges.	Percentages.	Expenses.
Coach	\$58,297.19	73.71%	\$8,115.15
Pullman	7,897.73	9.99%	1,099.86
Mail	7,637.74	9.66%	1,063.52
Express	5,254.82	6.64%	731.03
Total	\$79,087.48	100.00%	\$11,009.56

5754

2—Traffic Expenses.

Divided on the revenue basis adopted by the State, with Mail and Express Revenue excluded, is as follows:

	Gross Revenue.	Percentages.	Expenses.
Intrastate Passenger Revenue.....	\$246,101.33	59.04%	\$15,350.13
Interstate Passenger Revenue.....	170,735.14	40.96%	10,649.41
Total	\$416,836.47	100.00%	\$25,999.54

3—Transportation Expenses.

(a) Station Expenses:

Divided on the basis adopted by the State is as follows:

	Intrastate.	Interstate.	Total.
Number Passengers Handled.....	504,392	82,064	586,456
Add 100% a/c two terminals	504,392	.....	504,392

Total	1,008,784	82,064	1,090,848
Percentage of each.....	92.48%	7.52%	100.00%

Expenses divided as above (after allowing \$1,149.75 to Mail)	\$22,974.45	\$1,868.16	\$24,842.61
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(b) Yard and Train Expenses (Excluding Train Auditor's Expense) :

Divided on the basis adopted by the State is as follows:

	Car-Miles.	Percentages.	Expenses.
Coach	221,159	64.73%	\$84,809.06
Pullman	59,334	17.37%	22,758.12
Mail	35,480	10.38%	13,599.84
Express	25,683	7.52%	9,852.68
Total	341,656	100.00%	\$131,019.70

(c) Train Auditors' Expenses:

Divided on the basis of number of passengers handled, is as follows:

	No. of Pass. Handled.	Percentages.	Expenses.
Intrastate	504,392	86.00%	\$7,670.67
Interstate	82,064	14.00%	1,248.71
Total	586,456	100.00%	\$8,919.38

(d) Loss and Damage—Baggage:

Divided on the revenue basis adopted by the State, is as follows:

	Gross Revenue.	Percentages.	Expenses.
Intrastate Passenger Revenue.....	246,101.33	59.04%	\$246.22
Interstate Passenger Revenue.....	170,735.14	40.96%	170.82
Total	416,836.47	100.00%	\$417.04

5755 (e) Supervision and General:

Divided on the basis adopted by the State, is as follows:

	Direct Charges.	Percentages.	Expenses.
Coach	\$84,809.06	50.98%	\$5,175.47
Pullman	22,758.12	13.68%	1,388.79
Intrastate	30,891.34	18.57%	1,885.22
Interstate	3,287.69	1.98%	201.01
Mail	14,749.59	8.87%	900.48
Express	9,852.68	5.92%	601.30
Total	\$166,348.48	100.00%	\$10,151.97

4—Maintenance of Way and Structures.

5—General Expenses.

These expenses have no direct relation to any particular class of traffic. If they are to be considered what the State's witnesses term "Overhead Expenses," then they should, following the State plan, be divided between the several classes on basis of the direct charges to each, as follows:

	Direct Charges.	Percentages.	M. of W. & S.	General Expenses.
Coach	\$156,396.87	53.46%	\$67,890.43	\$12,359.68
Pullman	33,144.50	11.33%	14,388.30	2,619.44
Intrastate	48,126.69	16.45%	26,890.34	3,803.15
Interstate	14,138.11	4.83%	6,133.76	1,116.67
Mail	24,351.33	8.32%	10,565.81	1,923.54
Express	16,439.53	5.61%	7,124.31	1,297.00
Total	\$292,597.03	100.00%	\$126,992.95	\$23,119.48

6—Division of Cost of Coach and Pullman Service.

No record of the passenger-miles made in Pullman cars during any of the months, July to December, 1907, is available, but for the month of June, 1910, which month is about an average of the six months ended December 31, 1907, the records of the Company show:

Passenger-miles in Coaches.....	2,574,781 or 90.26%
Passenger-miles in Pullman.....	277,764, or 9.74%

9.74% of the total passenger-miles for the six months ended Dec. 31, 1907, should, therefore, be deducted (in the arbitrary proportion of Intrastate 25% and Interstate 75%, adopted by the State) before arriving at the percentages for dividing coach expenses between Intrastate and Interstate, as follows:

5756 Percentage for Division of Coach Expenses:	Pass-Miles Six Mos. Ended Dec., 1907.	
	Intrastate.	Interstate.
Total	12,345,719	9,930,034
Less Pullman Pass., 9.74%	542,415	1,627,244
Percentages	<u>11,803,304</u> 58.71%	<u>8,302,790</u> 41.29%

Percentages for Division of Pullman Expenses:	Pass-Miles Six Mos. Ended Dec., 1907.	
	Intrastate.	Interstate.
Total	542,415	1,627,244
Percentages (arbitrary)	25.00%	75.00%
Division.	Interstate.	Total.
Coach Expenses	\$97,711.54	\$236,646.98
Pullman Expenses	37,614.18	50,152.24
Total	<u>\$135,325.72</u>	<u>\$286,799.22</u>

7—Miscellaneous Revenue, Taxes, Rentals, Outside Operations and Value of Property.

Divided on the revenue basis adopted by both this Company and the State, is as follows:

	Interstate.	Mail.	Express.	Total.
Misc. Rev.	\$5,081.63	\$.....	\$.....	\$8,607.10
Out. Op. (def.)	811.38	.....	.....	1,374.29
Taxes	8,077.78	1,068.16	1,098.28	15,848.11
Rentals	1,299.67	171.86	176.71	2,549.88

Assessed Value of Property:

	Year 1908 Doubled.	Year 1909 Doubled.
Intrastate	\$1,540,304.82	\$1,952,079.33
Interstate	1,068,573.24	1,354,238.28
Mail	203,681.66	258,132.52
Express	209,423.44	265,409.26
Total	\$3,021,983.16	\$3,829,859.39

NOTE.—If item 3*b* "Yard and Train Expenses" was divided between Intrastate, Interstate, Mail and Express, on a straight revenue basis, the result would be as follows:

	Gross Revenue.	Percentages.	Expenses.
Intrastate	\$251,182.96	50.97%	\$66,780.74
Interstate	174,260.61	35.36%	46,328.57
Mail	33,218.77	6.74%	8,830.73
Express	34,155.57	6.93%	9,079.66
Total	\$492,817.91	100.00%	\$131,019.70

If this basis is used, it will change the final results as follows:

	Increase.	Decrease.
Intrastate Expense	\$18,138.42	\$.....
Interstate Expense .....	.....	9,255.98
Mail Expense .....	.....	7,657.41
Express Expense .....	.....	1,225.03
Total	\$18,138.42	\$18,138.42

EXHIBIT —

St. Louis Southwestern Railway Company.

State of Arkansas.

Recapitulation of Passenger Operating Expenses for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "S," Revised on Bases Explained in Succeeding Exhibit.

	Train costs.		Other costs.		Train and other costs.		Total.
	Coach. (1)	Pullman. (2)	Intrastate. (3)	Interstate. (4)	Mail. (5)	Express. (6)	
1. Maintenance of Equipment:							(7)
(a) Locomotive	\$29,431.20	\$7,897.73	\$	\$	\$4,719.54	\$3,419.17	\$45,467.64
(b) Passenger Train Cars	28,865.99	.....	.....	.....	2,918.20	1,835.65	33,619.84
(c) Supervision and General	8,115.15	1,099.86	.....	.....	1,063.52	731.03	11,009.56
Total Maintenance of Equipment	\$66,412.34	\$8,997.59	\$	\$	\$8,701.26	\$5,985.85	\$90,097.04
2. Traffic Expenses	\$	\$	\$15,350.13	\$10,649.41	\$	\$	\$25,999.54
3. Transportation Expenses:							
(a) Station Expenses	\$	\$	\$22,974.45	\$1,808.16	\$1,149.75	\$	\$25,992.36
(b) Yard and Train Expenses	84,809.06	22,758.12	.....	1,248.71	13,599.84	9,852.68	131,019.70
(c) Train Auditors' Expense .....	.....	.....	7,670.67	.....	.....	.....	8,919.38
(d) Loss and Damage—Baggage .....	.....	.....	246.22	170.82	.....	.....	417.04
(e) Supervision and General	5,175.47	1,388.79	1,885.22	201.01	900.48	601.00	10,151.97
Total Transportation Expenses ..	\$89,984.53	\$24,146.91	\$32,776.56	\$3,488.70	\$15,650.07	\$10,453.68	\$176,500.45
4. Maintenance of Way and Structures ..	\$67,890.43	\$14,388.30	\$20,890.34	\$6,133.76	\$10,565.81	\$7,124.31	\$126,992.95
5. General Expenses	\$12,359.68	\$2,619.44	\$3,803.15	\$1,116.67	1,923.54	\$1,297.00	\$23,119.48
Total Operating Expenses	\$236,646.98	\$50,152.24	\$72,820.18	\$21,388.54	\$36,840.08	\$24,860.84	\$442,709.46

EXHIBIT —

St. Louis Southwestern Railway Company.

State of Arkansas.

Summary of Operating Revenues, Operating Expenses, etc., Net Revenue, Valuation of Property and Return Thereon for Six Months Ended December 31, 1907, as Submitted by the State in Exhibit "U," Revised on Bases Explained in Immediately Preceding Exhibits.

	Freight.			Passenger.					Total Business. (9)
	Intrastate. (1)	Interstate. (2)	Total. (3)	Intrastate. (4)	Interstate. (5)	Mail. (6)	Express. (7)	Total. (8)	
1. Revenue:									
(a) Freight, Passenger, Mail and Express.....	\$173,064.45	\$1,597,230.02	\$1,770,294.47	\$246,101.33	\$170,735.14	\$33,218.77	\$34,155.57	\$484,210.81	\$2,254,505.28
(b) Miscellaneous	2,450.97	22,610.05	25,061.02	5,081.63	3,525.47	.....	.....	8,607.10	33,668.12
Total Revenue	\$175,515.42	\$1,619,840.07	\$1,795,355.49	\$251,182.96	\$174,260.61	\$33,218.77	\$34,155.57	\$492,817.91	\$2,288,173.40
2. Expenses:									
(a) Operating Expenses	\$151,269.09	\$774,859.15	\$926,128.24	\$224,293.68	\$156,714.26	\$36,840.68	\$24,860.84	\$442,709.46	\$1,368,837.70
(b) Taxes	5,495.26	50,693.51	56,188.77	8,077.78	5,603.89	1,068.16	1,098.28	15,848.11	72,036.88
(c) Rentals	5,547.49†	51,175.32†	56,722.81†	1,299.67	901.64	171.86	176.71	2,549.88	54,172.93†
(d) Outside Operations (Def.) .....	.....	.....	.....	811.38	562.91	.....	.....	1,374.29	1,374.29
Total Expenses	\$151,216.86	\$774,377.34	\$925,594.20	\$234,482.51	\$163,782.70	\$38,080.70	\$26,135.83	\$462,481.74	\$1,388,075.94
3.*Net Revenue	\$24,298.56	\$845,462.73	\$869,761.29	\$16,700.45	\$10,477.91	\$4,861.93†	\$8,019.74	\$30,336.17	\$900,097.46
4. Assessed Value of Property, 1908, Doubled.....	\$1,076,548.28	\$9,931,102.56	\$11,007,650.84	\$1,540,304.82	\$1,068,573.24	\$203,681.66	\$209,423.44	\$3,021,983.16	\$14,029,634.00
*Percentage of Net Revenue to Valuation.....	2.26%	8.51%	7.90%	1.08%	0.98%	2.39%†	3.83%	1.00%	6.42%
5. Assessed Value of Property, 1909, Doubled.....	\$1,364,345.27	\$12,586,015.34	\$13,950,360.61	\$1,952,079.33	\$1,354,238.28	\$258,132.52	\$265,409.26	\$3,829,859.39	\$17,780,220.00
*Percentage of Net Revenue to Valuation.....	1.78%	6.72%	6.23%	0.86%	0.77%	1.88%†	3.02%	0.79%	5.06%

*The "Net Revenue" and the "Percentage of Net Revenue to Valuation" given herein, are based on the returns for the largest half of the fiscal year ended June 30, 1908, and it is, therefore, improper to arbitrarily double this percentage, or to cut the valuation half in two, and call the result the rate of annual return on the investment. For all business in Arkansas the net revenue for the six months, July to December, 1907, was 40.16% greater than the net revenue for the six months, January to June, 1908. To equalize the net revenue for the six months ended December 31, 1907, to a basis of one-half of the year, it would be necessary to reduce the same 20%.

[† In red ink in copy.]

EXHIBIT —.

St. Louis Southwestern Railway Company.

State of Arkansas.

Summary of Revenues, Expenses, and Net Revenue for the Six Months Ended December 31, 1907, Divided Between Intrastate, Interstate, Mail and Express Business, on Bases used by the State (Exhibit "V") Revised as per Immediately Preceding Statements.

	Intrastate.			Interstate.			Mail	Express	Total.
	Freight. (1)	Passenger. (2)	Total. (3)	Freight. (4)	Passenger. (5)	Total. (6)	Business. (7)	Business. (8)	
1. Revenue	\$175,515.42	\$251,182.96	\$426,698.38	\$1,619,840.07	\$174,260.61	\$1,794,100.68	\$33,218.77	\$34,155.57	\$2,288,173.40
2. Expenses	151,216.86	234,482.51	385,699.37	774,377.34	163,782.70	938,160.04	38,080.70	26,135.83	1,388,075.94
3.*Net Revenue	<u>\$24,298.56</u>	<u>\$16,700.45</u>	<u>\$40,999.01</u>	<u>\$845,462.73</u>	<u>\$10,477.91</u>	<u>\$855,940.64</u>	<u>\$4,861.93†</u>	<u>\$8,019.74</u>	<u>\$900,097.46</u>
4. Assessed Value of Property Doubled—1908.....	\$1,076,548.28	\$1,540,304.82	\$2,616,853.10	\$9,931,102.56	\$1,068,573.24	\$10,999,675.80	\$203,681.66	\$209,423.44	\$14,029,634.00
*Percentage of Net Revenue to Valuation.....	<u>2.26%</u>	<u>1.08%</u>	<u>1.57%</u>	<u>8.51%</u>	<u>0.98%</u>	<u>7.78%</u>	<u>2.39%†</u>	<u>3.83%</u>	<u>6.42%</u>
5. Assessed Value of Property Doubled—1909.....	\$1,364,345.27	\$1,952,079.33	\$3,316,424.60	\$12,586,015.34	\$1,354,238.28	\$13,940,253.62	\$258,132.52	\$265,409.26	\$17,780,220.00
*Percentage of Net Revenue to Valuation.....	<u>1.78%</u>	<u>0.86%</u>	<u>1.24%</u>	<u>6.72%</u>	<u>0.77%</u>	<u>6.14%</u>	<u>1.88%†</u>	<u>3.02%</u>	<u>5.06%</u>

* The "Net Revenue" and the "Percentage of Net Revenue to Valuation" given herein, are based on the returns for the largest half of the fiscal year ended June 30, 1908, and it is, therefore, improper to arbitrarily double this percentage, or to cut the valuation half in two, and call the result the rate of annual return on the investment. For all business in Arkansas the net revenue for the six months July to December, 1907, was 40.16% greater than the net revenue for the six months, January to June, 1908. To equalize the net revenue for the six months ended December 31, 1907, to a basis of one-half of the year, it would be necessary to reduce the same 20%.

[† In red ink in copy.]

Endorsed: Filed June 8th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5760

5761

EXHIBIT "A."

EXHIBIT "A."

St. Louis Southwestern Railway Company.

State of Arkansas.

Statement of Trans-State, Inter-State and State Freight Handled During the Month of January, 1909.

Character of freight.	(1) Number of tons.	(2) Percentage of total tons.	(3) Revenue.	(4) Percentage of total revenue.	(5) Average amount received per ton.	(6) Number of tons one mile.	(7) Percentage total ton miles.	(8) Average amount received per ton per mile. (Mills.)	(9) Average length of haul. (Miles.)
Trans-State:									
1. Carload	48,205	36.00	\$83,552.23	30.67	\$1.7333	13,827,834	52.53	6.042	286.85
2. Less than car-load.....	10,654	7.96	55,865.95	20.50	5.2437	3,265,547	12.40	17.108	306.51
3. Total Trans-State	58,859	43.96	139,418.18	51.17	2.3687	17,093,381	64.93	8.156	290.41
Inter-State:									
4. Carload	48,422	36.17	71,923.72	26.40	1.4854	7,526,599	28.59	9.556	155.44
5. Less than Carload.....	7,590	5.67	30,212.20	11.08	3.9805	929,537	3.53	32.502	122.47
6. Total Inter-State	56,012	41.84	102,135.92	37.48	\$1.8235	8,456,136	32.12	12.078	150.97
Intra-State:									
7. Carload	16,707	12.48	20,498.29	7.52	1.2269	693,255	2.64	29.568	41.49
8. Less than Carload.....	2,306	1.72	10,417.97	3.83	4.5178	82,238	.31	126.681	35.66
9. Total Intra-State	19,013	14.20	30,916.26	11.35	1.6261	775,493	2.95	39.867	40.79
10. Grand Total	133,884	100.00	272,470.36	100.00	2.0351	26,325,010	100.00	10.350	196.62
Total Inter-State (Line one to six):									
11. Carload	96,627	72.17	155,475.95	57.06	1.6090	21,354,433	81.12	7.281	221.00
12. Less than carload.....	18,244	13.63	86,078.15	31.59	4.7182	4,195,084	15.93	20.519	229.94
13. Total	114,871	85.80	241,554.10	88.65	2.1028	25,549,517	97.05	9.454	222.42
14. All Carload—Total	113,334	84.65	175,974.24	64.58	1.5527	22,047,688	83.75	7.982	194.54
15. All less than Carload—Total.....	20,550	15.35	96,496.12	35.42	4.6957	4,277,322	16.25	22.560	208.54

NOTE.—The Average haul of all Interstate Freight for the entire St. Louis Southwestern Railway Company System regardless of State lines, for the year ending June 30th, 1909, was 344.41 miles.

Endorsed: Filed July 18th, 1910. W. P. Felld, Clerk, by W. Presley Felld, D. C.

6. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business:

(a) Coach:

(1) Intrastate—58.71% of total.	\$138,935.44	\$	.....	\$	.....	\$	.....
(2) Interstate—41.29% of total.	*97,711.54	\$	97,711.54	\$	.....	\$	.....

(b) Pullman:

(1) Intrastate—27.85% of total.	*12,538.06	.....	.....	.....	.....	.....	.....
(2) Interstate—72.15% of total.	*37,614.18	.....	37,614.18	.....	.....	.....	.....

Total Cost of Intrastate, Interstate, Mail and Express Business	\$224,283.08	\$156,714.26	\$36,840.68	\$24,860.84	\$442,700.46
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[*In red ink in copy.]

(Here follow pasters, marked pp. 5758-5761.)

5762 EXHIBIT "B."

5763 EXHIBIT "B."

DEFENDANT'S EXHIBIT "B."

All Changes in the Commission's Tariff Since July, 1903, to April 15th, 1908.

Bagging and ties and buckles: (Amdt. 15 to Commission's Tariff #1, effective 9/15-03; change from 3rd class to 250% of CL rating; reduction 39%: Figuring on following distances and rates:

Miles: 25-50-75-100-200.

3rd: 19-27-32-37-54. Total 169.

New rates: 15-17½-20-22½-27½. Total 102½.

Reduction 39%.

Cotton Seed CS Meal CS Hulls, LCL, (Am'd't 18, effective 6-15-04, 4th class to L. C. L. corn rates:

4th: 16-22-27-32-42. Total 139.

New rates: 14-15-20-24-30. " 103.

Reduction 26%.

Common soap & Soap Powder (Am'd't 18, effective 6-15-04) CL 5th Class to P.H.P rates:

5th: 12-17-19-24-32. Total 104.

New Rates: 8-10-12-15-17. 62.

Reduction 41%.

Less CL 4th Class to PHP rates:

4th: 16-22-27-32-42. Total 139.

New rates: 11-14-14-16-19. " 74.

Reduction 46%.

Wooden Cross Arms LCL 4th class to 300% of CL Lbr. rate (Am'd't 18, effective 6-15-04):

4th: 16-22-27-32-42. Totals 139.

New rates: 9-12-13½-15-21. 70½.

Reduction 49%.

Fire brick, CL (Am'd't 19 7-1-04) Class E to Com'd'y rate:

Class E: 5-7-8-10-13. Totals 43.

New rates: 4-4-6-7-10. 31.

Reduction 28%.

Fire brick, LCL (Am'd't 19-7/1/04) 4th Class to Com'd'y rates:

4th Class: 16-22-27-32-42. Total 139.

New Rates: 12-12-18-21-30. 93.

Reduction 39%.

Wagons, farm and log CL; (Am'd't 19-7/1/04) Class A to Com'd'y rates:

A: 12-18-20-26-33. Total 109.

New Rates: 9-13-15-18-26. 81.

Reduction 30%.

L. CL. 1st to Com.: 24-32-42-47-71. Total 216.

18-26-30-36-52. 162. 25% reduction.

5764 Cedar, ginger ale, pop soda, mineral and spring water CL (Am'd't 2 to classification rulings) Effective 6-15-04, changed to Class "C."

Agricultural implements, Am'd't 2 to classification rulings, Oct. 3, '04, provision for 1 stop in transit for \$5. charge.

Plow Points, plow irons, etc. L. C. L., Am'd't 5 to classification rulings, from 2nd class to 3rd class May 25th, '05.

2nd: 21-30-37-42-63. Total 193.

3rd: 19-27-32-37-54. 169.

Reduction 13%.

Canned goods, LCL Am'd't 5, classification rulings; this amendment construes item pickles to include capers, catsup, horse radish, mustard olives, pepper sauce, and salad dressing.

Portable houses: Am'd't 5 to classification rulings; effective June 26-05; provides new rating of 3 cts. per cwt. higher than lumber rates.

Hay, Am'd't 5 to classification rulings, 7-25-05, provides that hay may be shipped with flour or corn, and articles taking same rates, at the highest rates of any article loaded in the car.

Rule in regard to return shipments, Am'd't 5 to classification rulings 8-5-05; rule re-written, not to make changes but to make the meaning plain.

Bagging and ties, LCL am'd't 5 to classification ruling, 8-19-05, change from 250% to 150% of CL bagging rates:

250%: 15-17½-20-22½-27½. Total 102½.

150%: 9-10½-12-13½-16½. 61½.

Reduction 40%.

Sugar, CL Am'd't 5 to classification rulings, 11-20-05; reduces rates for distances exceeding 200 miles, 3%.

Mince meat; am'd't 5, classification rulings, 11-20-05; added to canned goods mixture; rates:

4th: 16-22-27-32-42. Total 139.

New rate: 12-15-17-18-20. " 82.

Reduction 41%.

3 Mile rate for CL; am'd't 5 to classification rulings, 11-20-05; reduced to 1¢ per 100 pounds; minimum \$5. per car; former rates on different commodities ranged from 2 to 5¢ per 100.

Concrete building material, CL/ from Class E. to 150% of brick rates; am'd't 5 to classification rulings, 11-20-05.

Class E: 5-7-8-10-13. Total 43.

New rates: 2-2-3-3½-5. 15½.

Reduction 66%.

5765 Vinegar and cider CL and LCL Am'd't 5 to classification ruling, changed from 5th to CL Com'd'y, effective 11-20-05:
5th: 12-17-19-24-32. Total 104.

New rates: 5-7-10-11-13 46.

Reduction 56%.

Added to vegetable mx. LCL 4th to commodity:

4th: 16-22-27-32-42. Total 139.

New rates: 10-14-20-22-25. 91.

Reduction —.

Machinery to be repaired CL, changed from "A" to $\frac{1}{2}$ of "A," effective 11-20-05:

A: 12-18-20-26-33. Total 109.

New rate: 6-9-10-13-16 $\frac{1}{2}$. 54 $\frac{1}{2}$.

Reduction 35%.

Machinery LCL (Voluntary) Saw mills, etc. 1st to 3rd:

1st: 24-32-42-47-71. Total 216.

New rates: 19-27-32-37-54. 169.

Reduction 22%.

Millet seed CL, Am'd't 5 to classifications rulings effective 5-6-06, changed from Class A to corn rates:

A: 12-18-20-26-33. Total 109.

New R.: 4-5-7-8-10. 34.

Reduction 69%.

L. C. L., changed from 3rd class to corn rates:

3rd: 19-27-32-37-54. Total 169.

New Rates: 14-15-20-24-30. 103.

Reduction 39%.

Iron Grate bars LCL Am'd't 5 to classification rulings, 5-6-06, 50 to 100 lbs. weight changed from 1st to 4th class:

1st: 24-32-42-47-71. Total 216.

New rates: 16-22-27-32-42. 139.

Reduction 36%.

Alfalfa, broom corn, clover and grass seed, Am'd't 5 to classification rulings, 5-6-06: CL changed from Class A to corn rates:

Class A: 12-18-20-26-33. Total 109.

New rates: 4-5-7-8-10. " 34.

Reduction 69%.

L. C. L., changed from 3rd to corn rates:

3rd: 19-27-32-37-54. Total 169.

New rates: 14-15-20-24-30. 103.

Reduction 39%.

Wire and Nails mxd., Am'd't 14 SDT 2, 1-20-05:

L. C. L. changed from 5th class to commodity, added to wire fencing, poultry netting, wire hoop, wire stretchers, and wire gates.

5th Class: 12-17-19-24-32. Total 104.

New rates: 6-8-10-11-14. 49.

Reduction 53%.

L. C. L., approximately changed from 3rd to commodity:

3rd: 19-27-32-37-54. Total 169.

New R.: 12-14-14-15-20. 75.

Reduction 55%.

5766 Saw dust added to cord wood, Am. 2 SDT 2, 3-20-05, CL changed from Class "E" to Commodity:

Class E: 5-7-8-10-13. Total 43.

New rates: 2-2-2½-5. 14½.

Reduction 66%.

Rice, Bran and Rice hulls, added to corn mxs, am'd't 2 to SDT 2 CL, changed from Class B to commodity:

Class B: 9-13-15-18-26. Total 81.

New rates: 4-5-7-8-10. 34.

Reduction 58%.

LCL 4th class changed to commodity:

4th Class: 14-15-20-24-30. Total 139.

New rates: 16-22-27-32-42. 103.

Reduction 26%.

Wheelbarrows Am. 14 to SDT 2, 11-20-05, CL changed from Class A to commodity:

Class "A": 12-18-20-26-33. Total 109.

New rates: 10-15-17-22-28. 92.

Reduction 16%.

Sawed and bent shapes for Agr. implements; Am. 14 to SDT 2, 11-20-05, CL changed from lumber and 5¢ to Lumber:

Old rate: 8-9-9½-10½. Total 48½.

New rate: 3-4-4½-5-7. 23½.

Reduction 53%.

Clariphos & Mexota, 11-20 05, added to veg. mx., account new drinks, small change.

Minimum charge rule changed 12-22-06:

35-25-25.

25-40-60.

Cotton, flat rate, amd. 15, 9-16-07, no change, as providing for concentration only. 10-12-14-15-40.

Handles CL, Am'd't 15, 2-1-08, changed from 5¢ and 1 br. to 3¢ and 1 br.; reduction of 2¢ per cwt.

Dowell Pins, Am'd't 15, 2-20-08, 1 br. & 5¢ not previously classified.

Mining Cars, Am'd't 15, 2-1-08, added to farm wagon rates; changed from Class A to Com..

Class "A": 12-18-20-26-33. Total 109.

Com.: 9-13-15-18-26. 81.

Reduction 36%.

Plow handles, Am'd't 15, 3-18-07, shellaced added.

2504

ROBERT P. ALLEN ET AL. VS.

5767

Coal and Coke and Slack.

S. D. T. #2. Am'd't 14, Effect. Nov. 1, 1906.

	Coal.	Slack.	Coal.	Slack:
25 mi...	50	50	50	45
50 " ..	50	50	50	45
75 " ..	75	70	75	60
100 " ..	95	80	95	70
150 " ..	115	105	110	90
200 " ..	140	130	140	120
Total..	555		520	6% decrease.
		485		430 11% reduction slack.

Main change was joint rate brought to cont. mileage basis.

Ordinary effect 15¢ per ton, equivalent to reduction at

Miles.

150	115	105	
	110	90	15%
200	155	135	
	140	120	11%
250	180	160	
	165	145	10%

Oil, Carload. C. L.

	5th class. S. D. T. #2.	Commod. sup. 11 to #2, 9, 22, '06.	75% of 5th class, sup. 13, 2, 1, '07.	Commod. sup. 14, March 18, '07.	
25 mi.....	16	6	9	7	
50 "	17	8½	12¾	8	
75 "	19	9½	14¼	10	
100 "	24	12	18	12	
200 "	32	16	24	16	
300 "	37	18½	27¾	19	
	141	70½	105¾	72	Net Reduct.
C. L...	100%	50%	75%	51%	49%

L. C. L.

75 mi.....	16	8	12	9
50 "	22	11	16½	11
75 "	27	13½	20¼	14
100 "	32	16	24	16
200 "	42	21	31½	21
300 "	47	23	35¼	25
	186	92½	139½	96
L. C. L..	100%	50%	75%	52%
L. C. L.		Net Reduction, 48%		

Excelsior, Am'd't 15, effective 4-15-1908, changed commodity at certain distances:

Old rate: 6-8-10-12-18, Total 54.
New rate: 6-8- 8- 9-13. 44.

Reduction 19%.

Iron Articles, Am'd't 15, effective 4-15-'08, certain articles added, viz: Angle, channell, hoop, *SK*ee*p*, Tank iron and boiler plates, band iron, for water tanks, cisterns, and conduits, nail plates, washers, sash weights, shingle bands, iron and steel bolts and 5768 nuts, rock and brock face iron siding; account interstate mixture; changed from approximately 4th Class to commodity.

4th Class Approx.: 16-22-27-32-42. Total 139.
Com. 12-14-14-15-20. 75.
Reduction 46%.

Carload Approx.:

5th Class: 12-17-19-24-32. Total 104.
Com. 6- 8-10-11-14. 49.
Reduction 53%.

Rough Rice, changed from rice to rough rice:
8-8-10- 11- 13. Total 50.
4-5-6½-7½-12½. 35½.
Reduction 29%.

5769 Endorsed: Filed July 18th, 1910. W. P. Field, Clerk, by
W. Presley Field, D. C.

EXHIBIT "C."

5770

5771

	Between trains.		Between Intrastate, Interstate.
	Local.	Through.	
1. Maintenance of Way:			
Accounts 1 to 27.....	Basis car miles straight.		
2. Maintenance of Equipment:			
(a) Locomotives:			
(1) Yard	Yard engine mileage.		
(2) Road	Road engine mileage.		
(b) Freight Train cars 38, 39, 40.....	Straight car miles.		
(c) Accounts 28, and 47 to 56, Supervision and General	On basis direct Maintenance of Equipment.		
3. Traffic Expenses:			
Accounts 57 to 65.....	On basis total direct for actual expenses accrued within the state.		
4. Transportation Expenses:			
(a) Station Expenses—Accounts 68, 72, 100.....	On basis tons handled length of haul considered.		
(b) Yard and Terminal Expenses, Accounts 73 to 84. On basis of cars han- dled.			
(c) Fuel and Road Locomotive Expenses, Accounts 88 to 91.....	Actual and on basis of actual.		

- (d) Engine House Expenses—Road, Account 87.... Engine miles.
 (e) Road enginemen and trainmen, Accounts 86, 94. Actual.
 (f) Other train expenses, Accounts 95, 96, 97, 99,
 108, 109, 110..... Train miles.
 (g) Loss and Damage—Freight, Account 106..... Actual.
 (h) All Other freight..... On basis direct.
5. General Expenses On basis of total above.

Final apportionment of all above grand total train costs on basis of ton miles.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C. "C."

5772 EXHIBIT "D."

5773 EXHIBIT "D."

Sept. 8th, 1903:

Commission's Standard Freight Distance Tariff Rates made effective on the Searcy & Des Arc R. R. on application of the Rock Island.

Nov. 3rd, 1903:

Complaint of Kerlin Lumber Co. vs. St. Louis Southwestern Railway Dismissed.

Nov. 24th, 1903:

Application of Pine Bluff merchants for flat rates on uncompressed cotton—dismissed.

Feb. 23rd, 1904:

Application of Texarkana Merchants to equalize rates from Texarkana to points north on the Cotton Belt Ry. and Iron Mountain Ry. with the rates from Little Rock and Pine Bluff—denied and dismissed.

Feb. 5th, 1904:

Application of Prescott & Northwest R. R. to be excepted from Commission's Joint Tariff granted.

May 4th, 1904:

Cotton Belt Lumber Co. vs. Cotton Belt Railway for overcharge—Complaint dismissed.

June 7th, 1904:

Proposed change in Classification on Buggies and Carriages dismissed.

Nov. 4th, 1904:

Louisiana & Northwest Railway. The Commission made order allowing this road to charge \$.50 passenger fare between McNeil and Magnolia—regular fare \$.25.

5774 Aug. 9th, 1905:

Resolution of Commissioner B. B. Hudgins providing for reduction of passenger fare on lines of 75 miles or more to $2\frac{1}{2}$ cents per mile—resolution defeated.

May 9th, 1906:

Petition of citizens of Lake Village, Ark., for increased passenger service on the Iron Mountain Railway—dismissed.

Oct. 10th, 1906:

Dyer, Ark.—Petition for Depot—Dismissed.

Jan. 9th, 1907:

Oil Rates raised at requests of Railroad Companies.

Apr. 3d, 1907:

Complaint of Rose City Cotton Oil Co. against Iron Mountain Railway and Cotton Belt Railway, that twenty days was required to transport one car from Rose City Mill to Conway, Arkansas—dismissed, it appearing that a portion of the delay was chargeable to complainant.

October 3d, 1907:

Petition for Agency at Cross Roads, Rock Island Railroad—denied.

Feb. 5th, 1908:

1. Tyronza, Arkansas—Petition for agency, Frisco Railroad—denied.

2. Proposed ruling in regard to discontinuing passenger trains, provided that the Commission be given notice on such occasions—after a full hearing, it appearing that the proposed ruling would work a hardship on the railroad companies, the matter was dismissed.

Application for reduction in rates on private cars, show cars, peddler cars, etc.—dismissed, it appearing that present rates charged by the railroads was reasonable and just.

Mar. 4th, 1908:

Application of the National Oil & Fuel Co., of Muskogee, Oklahoma, for commodity rate on crude oil was denied, it appearing that rates now in effect are reasonable.

May 6th, 1908:

(1) Petition for depot at Comal, Arkansas—dismissed.

(2) Petition for Sunday train service on Greenwood Branch of Iron Mountain Railway—dismissed.

(3) Application to require the Iron Mountain Railway Co. to fence its right of way in Arkansas, south of Little Rock—dismissed.

May 21, 1908:

Application of M. & N. A. R. R. to apply the Short Line Passenger Rate (three cents per mile) on each of the sections of its line of railway south of Leslie, Arkansas—granted.

June 4th, 1908:

(1) Pine City, Ark., Arkansas Midland Ry., Petition for Depot—dismissed.

(2) Moscow, Ark., Iron Mountain Railway, petition for railroad agency—dismissed.

(3) Simms, Ark., Rock Island Ry., petition for depot—
5776 dismissed.

(4) Wickes, Ark., Kansas City Southern Railway—petition for telegraph service—dismissed.

(5) Cove, Arkansas, Petition for telegraph service—dismissed.

(6) Application of Bryant Lumber Company for reduction of Rough Material Rates, denied.

Oct. 21st, 1908:

Danville, Arkansas—petition for night operator—dismissed.
Rock Island.

Application of Little Rock jobbers for commodity rate on soda, carloads,—denied and dismissed.

5777 Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk.
By W. Presley Feild, D. C.

EXHIBIT "E."

EXHIBIT E.

5778
5779
Answer to Judge Hill's Queries as Shown on Pages 4 and 5 of Typewritten Testimony Taken at Little Rock, Ark., on April 19, 1910.

Item.	Ton miles for six months ending Dec. 31, 1907.	Avg. revenue per ton per mile for January, 1909.	Assumed revenue for six months ending Dec. 31, 1907.		Per cent.
			\$339,380.07		9.64
			1,747,396.07		88.96
				25,061.02	1.40
			\$173,064.45		
			1,597,230.02		

1.19% of total Freight Expenses (\$11,020.92) is chargeable to Miscellaneous, leaving \$915,107.32 to be divided between State and Intrastate Freight.

Results Based on Formula Prescribed for Exhibit No. 23.

Item.	Per cent.	Assumed revenue and division of expenses.	Amt. under Judge Van- deventer's theory of 100% ex. cost for State business.
State Frt. Revenue.....	16.26	\$339,380.07	.....
Interstate Frt. Rev.....	83.74	1,747,396.57	.....
	<u>100.00</u>	<u>\$2,086,776.64</u>	<u>.....</u>
State Frt. Expenses.....	16.26	\$148,796.45	\$256,047.03— 27.98%
Interstate Frt. Exps.....	83.74	766,310.87	659,060.29— 72.02%
	<u>100.00</u>	<u>\$915,107.32</u>	<u>\$915,107.32—100.00%</u>

5780

Summary, State Traffic Only.

	Straight revenue basis.	100% extra cost basis.
Revenue	\$339,380.07	\$339,380.07
Expenses	148,796.45	256,047.03
Balance.....	<u>\$190,583.62</u>	<u>\$83,333.04</u>

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT "F."

EXHIBIT F.

Comparative Rates from Memphis to Points on White River Branch of the St. Louis, Iron Mountain and Southern Railway Against Rates for Equal Distance—Commission Tariff No. 3 and Court Tariff.

To—	From—	1	2	3	4	5	Distance.
Guion.	Memphis.....	69	59	47	40	30	172 Miles.
	Com. Tariff #3.....	66	59	51	40	30	
	Court Tariff.....	71	63	55	40	32	
Sylamore.	Memphis.....	70	59	47	40	30	184 Miles.
	Com. Tariff #3.....	68	61	52	41	31	
	Court Tariff.....	73	65	56	41	33	
Calico.	Memphis.....	70	59	47	40	30	201 Miles.
	Com. Tariff #3.....	74	66	50	43	32	
	Court Tariff.....	77	68	58	43	34	
Cotter.	Memphis.....	70	59	47	40	30	241 Miles.
	Com. Tariff #3.....	79	72	47	44	30	
	Court Tariff.....	85	72	60	45	36	

Office of Merchants Freight Bureau, Little Rock, Arkansas, April 28th, 1910.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5783

EXHIBIT "G."

5784

EXHIBIT "G."

St. Louis Southwestern Railway Company.

In State of Arkansas.

Statement covering six months ended December 30, 1907, prepared in answer to request of Judge Hill, showing assumed Revenues on bases of State Freight, 96.1% increase over actual; Interstate Freight, 9.4% increase over actual; State Passenger, 35.9% increase over actual; Interstate Passenger, no increase over actual; Miscellaneous, no increase over actual; and also showing the actual Operating Expenses, Taxes and Rentals divided between the several classes of traffic on the basis of the assumed Gross Revenues, ascertained as above; also double the assessed valuation divided on the same Gross Revenue basis and the per cent of return on said valuation.

Item.	Gross revenues.	Per cent of frt. or pass.	Per cent of total.	Operating expenses, taxes, rentals, etc.	Net revenues.	Double the assessed valuation.	Return per annum equal to
Freight—State	\$333,380.07	16.07	12.61	\$148,742.90	\$190,637.08	\$1,769,136.85	21.52%
Pass.—State	332,236.80	57.39	12.34	265,418.26	66,818.54	1,731,256.83	7.72%
Total, State	\$671,616.87	.....	.....	\$414,161.25	\$257,455.62	\$3,500,393.68	14.72%
Freight—Interstate ...	\$1,747,396.57	82.74	64.95	\$765,836.04	\$981,559.93	\$9,112,247.28	21.52%
Pass.—Interstate	170,735.14	29.49	6.35	136,385.87	34,349.27	800,881.76	7.72%
Total, Interstate	\$1,918,131.71	.....	.....	\$902,222.51	\$1,015,909.20	\$10,003,129.04	20.32%
Misc. Freight	\$25,061.02	1.19	.93	\$11,014.57	\$14,046.45	\$130,475.00	21.52%
Misc. Passenger	\$75,981.44	13.12	2.82	\$60,677.61	\$15,303.83	\$395,635.68	7.72%
Grand Total	\$2,690,791.04	.....	100.00	\$1,388,075.94	\$1,302,715.10	\$14,029,634.00	18.58%

Endorsed: Filed July 18th, 1910. W. P. Felld, Clerk. By W. Presley Felld, D. C.

EXHIBIT "H."

5785

EXHIBIT "H."

5786

St. Louis Southwestern Railway Company.

In State of Arkansas.

Statement Supplemental to Exhibit No. 33, Prepared in Answer to Request of Judge Hill, Showing Operating Expenses, Taxes, Rentals, etc., and Double the Assessed Valuation of Property, Divided Between the Several Classes of Traffic on Basis of Actual Gross Revenues, for Six Months Ended December 31, 1907.

Item.	Gross revenues.	Per cent of frt. or pass.	Per cent of total.	Operating expenses, taxes, rentals, etc.	Net revenues.	Double the assessed valuation.	Return per annum equal to
Freight—State	\$173,064.45	9.64	7.56	\$89,227.28	\$83,837.17	\$1,060,640.33	15.80%
Pass.—State	246,101.33	49.94	10.76	230,963.38	15,137.95	1,509,588.62	2.00%
Total, State	\$419,165.78	.....	.....	\$320,190.66	\$98,975.12	\$2,570,228.95	7.70%
Freight—Interstate ...	\$1,597,230.02	88.96	69.80	\$823,408.60	\$773,821.42	\$9,792,684.53	15.80%
Pass.—Interstate	170,735.14	34.64	7.46	160,263.68	10,531.46	1,046,610.70	2.00%
Total, Interstate	\$1,767,965.16	.....	.....	\$983,612.28	\$784,352.88	\$10,839,295.23	14.46%
Misc. Freight	\$25,061.02	1.40	1.10	\$12,958.32	\$12,102.70	\$154,325.97	15.80%
Misc. Passenger	\$75,981.44	15.42	3.32	\$71,314.68	\$4,666.76	\$465,783.85	2.00%
Grand Total	\$2,288,173.40	.....	100.00	\$84,273.00	\$900,067.46	\$14,029,634.00	12.84%
				\$1,398,075.94			

Endorsed: Filed July 18th, 1910. W. P. Feld, Clerk. By W. Presley Feld, D. C.

5787

EXHIBIT "I."

5788

EXHIBIT "I."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Freight Statistics—October, 1907.

	Ton Miles of Freight Carried.	Local Trains.	Through Trains.	Total.
Interstate:				
Carload	8,991,484		96,992,097	105,983,581
Less-than-carload	638,036		4,075,841	4,713,877
Total	9,629,520		101,067,938	110,697,458
Percentage of each	8.70%		91.30%	100.00%
Intrastate:				
Carload	3,382,246		5,982,552	9,364,798
Less-than-carload	459,204		.....	459,204
Total	3,841,450		5,982,552	9,824,002
Percentage of each	39.10%		60.90%	100.00%
Total Revenue Freight.....				
Percentage of each.....	13,470,970		107,050,490	120,521,460
	11.18%		88.82%	100.00%

Ton Mileage of Each Class of Train—Expressed in Percentages.

Interstate:

Carload	66.74%	90.60%	87.94%
Less-than-carload	4.75	3.81	3.91

Total	71.49%	94.41%	91.85%
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Intrastate:

Carload	25.10%	5.59%	7.77%
Less-than-carload	3.4138

Total	28.51%	5.59%	8.15%
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Total Revenue Freight.....	100.00%	100.00%	100.00%
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Mileage Statistics:

Car Miles	1,112,865	6,333,610	7,446,475
Caboose-Miles	60,485	199,036	259,521
Engine-Miles	70,583	199,981	270,564

Total	1,243,933	6,732,627	7,976,560
Percentage of each class.....	15.59%	84.41%	100.00%

Train-Miles	70,583	196,512	267,095
Percentage of each class.....	26.42%	73.58%	100.00%

Engine-Miles	70,583	199,981	270,564
Percentage of each class.....	26.08%	73.92%	100.00%

Freight-Car and Caboose-Miles.....	1,173,350	6,532,646	7,705,996
Percentage of each class.....	15.22%	84.78%	100.00%
Average number of cars per train.....	16.6	33.2	28.9
Number of Trains run.....	1,116	2,758	3,874
Average length of run in miles.....	63.2	70.8	68.9
Average loading of revenue freight (considering all cars)—in tons.....	12.1	16.1	16.2
Average loading of revenue freight (considering loaded cars only)—in tons.....	14.7	19.2	18.6
Number of cars handled in and out of terminals where yard engines are maintained.....	32,232	133,482	165,714
Percentage of each.....	19.46%	80.54%	100.00%

5789 Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Freight Operating Expenses in Arkansas for the Six Months Ended December 31, 1907, Divided between Local and Through Train Service and between Intrastate and Interstate Business.

	Train Costs.			Other Costs.		
	Local. (1)	Through. (2)		Intrastate. (3)	Interstate. (4)	Total. (5)
1. Maintenance of Way and Structures.....	\$93,966.49	\$459,428.62				\$553,395.11
2. Maintenance of Equipment:						
(a) Locomotives:						
(1) Yard	\$13,453.83	\$55,681.97				\$69,135.80
(2) Road	43,733.35	70,807.25				114,540.60
(b) Freight Cars	107,288.53	370,697.11				477,985.64
(c) Supervision and General.....	15,378.22	46,481.07				61,859.29
Total Maintenance of Equipment...	\$179,853.93	\$543,577.40				\$723,431.33
3. Traffic Expenses						
4. Transportation Expenses:						
(a) Station Expenses				\$11,899.29	\$70,835.13	\$88,734.42
(b) Yard and Terminal Expenses.....				\$77,821.13	\$155,807.81	\$233,626.94
(c) Fuel and Locomotive Expenses.....	\$57,085.42	\$236,292.07				293,377.49
(d) Enginehouse Expenses	59,301.61	162,303.79				221,605.40
(e) Road Enginemen and Trainmen.....	15,194.55	38,439.58				53,634.13
(f) Other Train Expenses.....	165,806.65	301,758.52				467,565.17
(g) Loss and Damage—Freight.....	34,957.06	97,355.81				132,312.87
(h) Supervision and General.....	10,083.35	27,363.84		30,972.03	96,537.35	127,509.38
Total Transportation Expenses.....	\$342,488.64	\$861,483.61		\$112,062.41	\$259,969.64	\$1,576,064.30
5. General Expenses	\$27,699.72	\$83,799.92		\$5,579.61	\$15,138.99	\$132,218.24
6. Total Operating Expenses	\$644,008.78	\$1,948,289.55		\$129,571.31	\$351,973.76	\$3,073,843.40

9552

7. Division of Train Costs between Intrastate and Interstate Business:

(a) Local Trains:					
(1) Intrastate Freight—23.00% of Total .....	.....	167,442.28	.....	.....	.....
(2) Interstate Freight—74.00% of Total .....	.....	.....	.....	476,506.50	.....
(b) Through Trains: Freight—4.96% of Total .....	.....	.....	.....	.....	.....
(1) Intrastate Freight—95.04% of Total .....	.....	.....	.....	.....	.....
(2) Interstate Freight—95.04% of Total .....	.....	.....	.....	.....	.....
8. Total Cost of Intrastate and Interstate Business .....	.....	.....	.....	.....	.....

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Feld, Clerk. By W. Presley Feld, D. C.

EXHIBIT "K."

5792

EXHIBIT "K."

5793

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Bases Used in Arriving at Cost of Local and Through Freight Service and Intrastate and Interstate Freight Business in Arkansas for the Six Months Ended December 31, 1907.

1. Maintenance of Way and Structures.

The proportion of these expenses applicable to the freight business, as shown by the statements in this case submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1907, that month being considered representative of the business for the six months ended December 31, 1907. In arriving at the number of engine and car miles we have added 50% to the engine mileage of local trains for station switching, and have assumed that each engine mile was equivalent to $2\frac{1}{2}$ car miles. The total engine and car miles, with the percentage and amount of expenses chargeable to each class of service on this basis, are as follows:

	Local.	Through.	Total.
Engine Miles	70,583	199,981	270,564
50% added to Local Engine Mileage for station Switching.....	35,292	.....	35,292
Total.....	105,875	199,981	305,856

Engine Miles as above, multiplied by 2½ to get equivalent in car miles.....	264,688	499,952	764,640
Freight Car and Caboose Miles.....	1,173,350	6,532,646	7,705,996
Total.....	1,438,038	7,032,598	8,470,636
Percentage of each.....	16.98%	83.02%	100.00%
Expenses—Divided on above percentages.....	\$93,966.49	\$459,428.62	\$553,395.11

2. Maintenance of Equipment.

(a) Locomotives:

The expenses under this head are divided between yard, and local and through road locomotives on the basis of the locomotive mileage of each class during the month of October, 1907. We have added 50% to the mileage made by yard locomotives to provide for the possible extra maintenance due to yard service; have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local engines thus ascertained to provide for the possible extra maintenance due to switching service (making 75% added to the local engine mileage). The division between yard, and local and through road locomotives on this basis is as follows:

	Mileage.	Percentage.
5794		
Yard Locomotive Mileage.....	130,150	
50% added for extra repairs.....	65,075	
Local Locomotive Mileage.....	70,583	
75% added for extra Mileage and Repairs.....	52,937	
Through Locomotive Mileage.....	123,520	23.81
	199,981	38.55
Total.....	518,726	100.00%

The total expenses under this head amount to \$183,676.40. The amount chargeable to yard locomotives on this basis is 37.64%, or \$69,135.80; the amount chargeable to the local service is 23.81%, or \$43,733.35, and the amount chargeable to through service is 38.55% or \$70,807.25.

The expense of maintenance of yard locomotives (\$69,135.80) is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October, 1907. The total number of cars handled at terminals, where yard engines were maintained, together with the percentage and amount of expenses chargeable to each class of service, is as follows:

	Local.	Through.	Total.
Cars Handled	32,232	133,482	165,714
Percentage of each	19.46%	80.54%	100.00%
Expenses—Divided on above percentages	\$13,453.83	\$55,681.97	\$69,135.80

(b) Freight Cars:

The total amount of expense for Maintenance of Freight Cars is \$477,895.64. This amount is apportioned to Arkansas by the Railway Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to extra terminal handling of cars in local service. Mr. A. M. Wellington, in his work on "Railway Location" (Page 203) says that the stopping and starting at way stations is the cause of approximately 21.5% of the repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5% of the repair expenses. Taking these elements into consideration, the maintenance expenses may be divided as follows:

Stopping and Starting	21.5%	\$102,747.56
Terminal Handling	13.5	64,515.91
Other Expenses	65.%	\$167,263.47
		310,632.17
Total		\$477,895.64

5795 Assuming that each local train makes a stop say each five miles and each through train a stop say each twenty miles, the local service should be charged with four times as much as the through service, in proportion to car mileage for the expenses due to stopping and starting. Assuming also that each car in local service receives two terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with two times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling. These items may, therefore, be divided between local and through service on the following basis:

Stopping and Starting Expenses:		Local.	Through.	Total.
Car Miles		1,173,350	6,532,646	7,705,996
Same, with local car miles multiplied by four.....		4,693,400	6,532,646	11,226,046
Percentage of each.....		41.81%	58.19%	100.00%
Expenses—Divided on above percentages.....		\$42,958.75	\$59,788.81	\$102,747.56
Terminal Handling:				
Car Miles as above.....		1,173,350	6,532,646	7,705,996
Same, with local car miles multiplied by two.....		2,346,700	6,532,646	8,879,346
Percentage of each.....		26.43%	73.57%	100.00%
Expenses—Divided on above percentages.....		\$17,051.56	\$47,464.35	\$64,515.91

The balance of the expenses of freight car maintenance, \$310,632.17 is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

	Local.	Through.	Total.
Car Miles	1,173,350	6,532,646	7,705,996
Percentage of each.....	15.22%	84.78%	100.00%
Expenses—Divided on above percentages.....	\$47,278.22	\$263,353.95	\$310,632.17
The total expenses of maintenance of freight cars chargeable to each class of service, under the plans outlined above, are as follows:			
	Local.	Through.	Total.
Stopping and starting.....	\$42,958.75	\$59,788.81	\$102,747.56
Terminal Handling	17,051.56	47,464.35	64,515.91
Other Expenses	47,278.22	263,353.95	310,632.17
Total.....	\$107,288.53	\$370,607.11	\$477,895.64

(c) Supervision and General:

The total expenses under this head are divided between local and through service on the basis of the direct charges for maintenance of equipment, as follows:

	Local.	Through.	Total.
Direct Expenses	\$164,475.71	\$497,096.33	\$661,572.04
Percentage of each.....	24.86%	75.14%	100.00%
Expenses—Divided on above percentages.....	\$15,378.22	\$46,481.07	\$61,859.29

5796

3. Traffic Expenses.

These expenses are incurred in securing and looking after traffic. The amount apportioned to the State of Arkansas is based on the revenue train mileage in that State as compared with the revenue train mileage of the whole road. We have divided these expenses on a straight revenue basis, although of the opinion that this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense, is incurred in the effort to secure competitive business, while it is well known that intrastate business is largely non-competitive. The basis of dividing these expenses between intrastate and interstate business is as follows:

	Intrastate.	Interstate.	Total.
Total Freight Revenue.....	\$640,248.17	\$4,133,210.33	\$4,773,458.50
Percentage of each.....	13.41%	86.59%	100.00%
Expenses—Divided on above percentages.....	\$11,899.29	\$76,835.13	\$88,734.42

4. Transportation Expenses.

(a) Station Expenses:

These expenses cannot be divided between the two classes of train service, as they are not train expenses. They may, however, be divided between intrastate and interstate business in proportion to the volume of traffic of each class handled in the State. We have divided the expenses between intrastate and interstate business on the basis of the number of tons of each class of traffic, assuming, however, that each intrastate ton was handled twice and each interstate ton once, as follows:

	Intrastate.	Interstate.	Total.
Total Tons	684,122	2,739,131	3,423,253
Double number of Intrastate tons in order to provide for two handlings.....	684,122	.....	684,122
Total.....	1,368,244	2,739,131	4,107,375
Percentage of each.....	33.31%	66.69%	100.00%
Expenses—Divided on above percentages.....	\$77,821.13	\$155,805.81	\$233,626.94

(b) Yard and Terminal Expenses:

These expenses are divided between local and through business on the basis of the number of cars handled at terminals, as explained under the head of Maintenance of Yard Locomotives (2a). Of the total expenses, 19.46%, or \$57,085.42 are charged to local trains; and 80.54%, or \$236,262.07, are charged to through trains.

5797 (c) Fuel and Locomotive Expenses:

According to a test made on the St. Louis Southwestern Railway during the month of October, 1908, the local engines consumed $3\frac{1}{2}\%$ more fuel per engine mile than the through engines. Assuming that the same conditions would prevail on the St. Louis, Iron Mountain & Southern Railway during October, 1907, the fuel and the miscellaneous locomotive expenses would be divided between local and through service on the following basis:

	Local.	Through.	Total.
Engine Miles	70,583	199,981	270,564
Add $3\frac{1}{2}\%$ to local engine miles to equalize fuel consumption.....	2,470	.....	2,470
Total.....	73,053	199,981	273,034
Percentage of each.....	26.76%	73.24%	100.00%

We have used these percentages in dividing fuel and miscellaneous locomotive expenses for the six months ended December 31, 1907, amounting to \$221,605.40. The amount charged to local service is 26.76%, or \$59,301.61; and the amount charged to through service is 73.24%, or \$162,303.79.

(d) Enginehouse Expenses—Road:

These expenses, amounting to \$53,634.13, are divided between local and through service on the basis of the engine miles of each class of service during the month of October, 1907, assuming, however, that the local engines require 12% more enginehouse service per engine mile than the through engine. This assumption is based on the average engine run in the two classes of service. The engine miles and the percentages on which the expenses are divided, are as follows:

	Local.	Through.	Total.
Total Engine Miles.....	70,583	199,981	270,564
12% added to Local Engine Miles to cover extra expenses.....	8,470	.....	8,470
Total.....	79,053	199,981	279,034
Percentage of each.....	28.33%	71.67%	100.00%
Expenses—Divided on above percentages.....	\$15,194.55	\$38,439.58	\$53,634.13

(e) Road Enginemen and Trainmen:

An actual division of these expenses was made by us during the month of October, 1907, as follows:

	Local.	Through.	Total.
Total Amount	\$29,229.30	\$53,162.56	\$82,391.86
Percentage of each.....	35.47%	64.53%	100.00%

5798 We have used these percentages in dividing the total expenses under this head for the six months ended December 31, 1907. These expenses amounted to \$467,625.17, of which 35.47%, or \$165,866.65, are charged to local service, and 64.53%, or \$301,758.52, are charged to through service.

(f) Other Train Expenses:

These expenses are such as are incident to, or generally caused by, the operation of trains, and not included in the preceding classifications. They are divided between local and through service in proportion to the train miles of each class of service, during the month of October, 1907, as follows:

	Local.	Through.	Total.
Train Miles	70,583	199,512	267,095
Percentage of each.....	26.42%	73.58%	100.00%
Expenses—Divided on above percentages.....	\$34,957.06	\$97,355.81	\$132,312.87

(g) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1907, as follows:

	Intrastate.	Interstate.	Total.
Claims Paid	\$4,840.10	\$15,087.48	\$19,927.58
Percentage of each.....	24.29%	75.71%	100.00%
Expenses—Divided on above percentages.....	\$30,972.03	\$96,537.35	\$127,509.38

(h) Supervision and General:

These expenses are divided between local, through, intrastate, and interstate business on the basis of the direct charges to each of these classes, as follows:

	Train costs.		Other costs.	
	Local.	Through.	Intrastate.	Interstate.
Direct Expenses	\$332,405.29	\$836,119.77	\$108,793.16	\$252,343.16
Percentage of each.....	21.73%	54.66%	7.11%	16.50%
Expenses—divided on above percentages.....	\$10,083.35	\$25,363.84	\$3,299.25	\$7,656.48
				\$46,402.92

5. General Expenses.

These expenses are general to all classes of service. They may, therefore, be apportioned to local and through and intrastate and interstate business, on the basis of the direct charges for all other expenses of these classes, that being, perhaps, the best measure of the supervision necessary for each. The total direct charges and the percentage of general expenses applicable to each, are as follows:

	Train costs.		Other costs.	
	Local.	Through.	Intrastate.	Interstate.
Direct Expenses	\$616,309.06	\$1,864,489.63	\$123,991.70	\$336,834.77
Percentage of each	20.95%	63.38%	4.22%	11.45%
Expenses—divided on above percentages..	\$27,699.72	\$83,799.92	\$5,579.61	\$15,138.99
				\$132,218.24

6. Total Operating Expenses.

The total freight operating expenses are, as hereinbefore explained, divided between local and through train service, and intrastate and interstate business. The train costs are intended to include everything relating to the direct cost of the movement of freight trains, with all expenses incident to such movement. Station expenses and other items which do not affect the expenses of train operations are divided between intrastate and interstate business direct.

7. Method of Dividing Train Costs.

During the month of October, 1907, 39.10% of all Intrastate ton-miles and 8.70% of all Interstate ton-miles of freight were handled on local trains; and 60.90% of all Intrastate and 91.30% of all Interstate ton-miles were handled on through trains. Assuming that these same relative conditions would exist during the six months ended December 31, 1907, the total ton-miles of Intrastate and Interstate freight handled during that period would have been divided between local and through service as follows:

Local Trains:

Intrastate Business—39.10% of 47,860,299 ton-miles during six months' period.....	18,713,377
Interstate Business—8.70% of 612,303,696 ton-miles during six months' period.....	53,270,422
Total.....	<u>71,983,799</u>
Through Trains:	
Intrastate Business—60.90% of 47,860,299 ton-miles during six months' period.....	29,146,922
Interstate Business—91.30% of 612,303,696 ton-miles during six months' period.....	559,033,274
Total.....	<u>588,180,196</u>

In the accompanying statement, train costs are divided between Intrastate and Interstate business in proportion to the volume of traffic of each kind handled in each class of service, as ascertained above. The percentages used and the train costs divided are as follows:

Local Trains:	Ton miles.	Percentage.	Train costs divided.
Intrastate Business	18,713,377	26.00%	\$167,442.28
Interstate Business	53,270,422	74.00%	476,566.50
Total.....	<u>71,983,799</u>	<u>100.00%</u>	<u>\$644,008.78</u>
Through Trains:			
Intrastate Business	29,146,922	4.96%	\$96,635.16
Interstate Business	559,033,274	95.04	1,851,654.39
Total.....	<u>588,180,196</u>	<u>100.00%</u>	<u>\$1,948,289.55</u>

8. Total Cost of Intrastate and Interstate Business.

The total cost of these two classes of business is ascertained in the manner hereinbefore explained. These counts are carried into the "Statement of Revenue, Expenses, etc.," as item 2a (Operating Expenses) in columns #1 and 2.

Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, and Value of Property.

In the "Statement of Revenue, Expenses, etc.," the items under this head have been divided between intrastate and interstate business on a straight revenue basis, as follows:

	Intrastate.	Interstate.	Total.
Freight Revenue	\$640,248.17	\$4,133,210.33	\$4,773,458.50
Percentage of each.....	13.41%	86.59%	100.00%
Division on these percentages:			
Miscellaneous Revenue	\$16,469.41	\$106,345.00	\$122,814.41
Taxes	\$21,851.02	141,094.67	\$162,945.69
Rentals	2,156.94	13,927.62	16,084.56
Hire of Equipment.....	24,029.57	155,161.89	179,191.46
Assessed Value of Property Doubled.....	\$1,966,586.20	\$12,698,486.15	\$14,665,072.35

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

(Here follows pasteur, marked pp. 5801 and 5802.)

5801

EXHIBIT "L."

5802

EXHIBIT "L."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Passenger Operating Expenses in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Train and Other Costs, and Between Intrastate, Interstate, Mail, and Express Business.

	Train costs.		Other costs.		Train and other costs.		Total. (7)
	Coach. (1)	Pullman. (2)	Intrastate (3)	Interstate. (4)	Mail. (5)	Express. (6)	
1. Maintenance of Way and Structures.....	\$284,577.45	\$106,021.02	.....	.....	\$58,900.56	\$51,782.37	\$501,281.40
2. Maintenance of Equipment:							
(a) Locomotives	\$94,500.26	\$35,206.63	.....	.....	\$19,559.24	\$17,195.48	\$166,461.61
(b) Passenger Train Cars.....	62,711.39	.....	.....	.....	12,969.06	11,418.70	87,099.15
(c) Supervision and General.....	36,321.73	8,130.07	.....	.....	7,509.18	6,613.00	58,573.98
Total Maintenance of Equipment.....	\$193,533.38	\$43,336.70	.....	.....	\$40,037.48	\$35,227.18	\$312,134.74
3. Traffic Expenses .....	.....	.....	\$25,588.50	\$17,389.31	\$6,196.01	\$4,102.26	\$53,276.08
4. Transportation Expenses:							
(a) Station Expenses .....	.....	.....	.....	\$4,678.63	\$2,325.00	.....	\$59,381.44
(b) Yard and Train Expenses.....	\$311,706.90	\$116,128.25	\$52,377.81	.....	64,515.70	\$56,718.91	549,069.76
(c) Loss and Damage—Baggage.....	.....	.....	984.39	608.92	.....	.....	1,653.31
(d) Supervision and General.....	20,679.22	7,702.59	3,541.66	356.19	4,432.13	3,764.27	40,476.06
Total Transportation Expenses.....	\$332,386.12	\$123,830.84	\$56,903.86	\$5,703.74	\$71,272.83	\$60,483.18	\$650,580.57
5. General Expenses	\$85,881.83	\$28,938.10	\$8,745.74	\$2,443.66	\$18,697.22	\$16,060.64	\$160,767.19
6. Total Operating Expenses.....	\$896,378.78	\$302,126.66	\$91,238.10	\$25,536.71	\$195,104.10	\$167,655.63	\$1,678,039.98
7. Division of Coach and Pullman Costs Between Intrastate and Interstate Business:							
(a) Coach:							
(1) Intrastate—58.71% of Total.....	*\$526,263.98	.....	526,263.98	.....	.....	.....	.....
(2) Interstate—41.29% of Total.....	*\$370,114.80	.....	.....	370,114.80	.....	.....	.....
(b) Pullman:							
(1) Intrastate—25% of Total.....	.....	*\$75,531.67	75,531.67	.....	.....	.....	.....
(2) Interstate—75% of Total.....	.....	*\$226,594.99	.....	226,594.99	.....	.....	.....
8. Total Cost of Intrastate, Interstate, Mail, and Express Business.....			\$693,033.75	\$622,246.50	\$195,104.10	\$167,655.63	\$1,678,039.98

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5803

EXHIBIT "M."

5804

EXHIBIT "M."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Bases Used in Arriving at Cost of Intrastate and Interstate Passenger and Mail and Express Business in Arkansas for the Six Months Ended December 31, 1907.

As nearly all passenger trains on the St. Louis Iron Mountain and Southern Railway Company do a local business, we have not considered it necessary to make any division of expenses as between local and through service. Our statement of operating expenses covers the six months ended December 31, 1907, and the division of expenses is between coach and Pullman service, and intra-state, interstate, mail, and express business. In general, the expenses are divided on a car-mile basis, the mileage used be considered representative of the entire period. The coach in mileage from month to month, the figures used may be that of October, 1907. As there is very little change mileage includes the mileage of baggage, dining and parlor cars. The various classes of expenses are divided as follows:

1—Maintenance of Way and Structures.

Expenses divided between Coach, Pullman, Mail, and Express service on a car-mile basis, as follows:

	Car-Miles.	Percentage.	Expenses.
Coach	751,229	56.77%	\$284,577.45
Pullman	279,848	21.15	106,021.02
Mail	155,398	11.75	58,900.56
Express	136,766	10.33	51,782.37
Total	1,323,241	100.00%	\$501,281.40

2—Maintenance of Equipment.

(a) Locomotives:

Expenses divided between Coach, Pullman, Mail, and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

	Percentage.	Expenses.
Coach	56.77%	\$94,500.26
Pullman	21.15	35,206.63
Mail	11.75	19,559.24
Express	10.33	17,195.48
Total	100.00%	\$166,461.61

5805 (b) Passenger Train Cars:

Expenses divided between Coach, Mail, and Express service on a car-mile basis, as follows:

	Car-Miles.	Percentage.	Expenses.
Coach	751,229	72.00%	\$62,711.39
Mail	155,398	14.89	12,969.06
Express	136,766	13.11	11,418.70
Total	1,043,393	100.00%	\$87,099.15

(c) Supervision and General:

Expenses divided between Coach, Pullman, Mail, and Express service on the basis of the direct charges as apportioned, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$157,211.65	62.01%	\$36,321.73
Pullman	35,206.63	13.88	8,130.07
Mail	32,528.30	12.82	7,509.18
Express	28,614.18	11.29	6,613.00
Total	<u>\$253,560.76</u>	<u>100.00%</u>	<u>\$58,573.98</u>

3—Traffic Expenses.

Expenses divided between Intrastate, Interstate, Mail and Express business on a gross earnings basis, as follows:

	Gross Earnings.	Percentage.	Expenses.
Intrastate	\$836,540.20	48.03%	\$25,588.50
Interstate	568,476.21	32.64	17,389.31
Mail	202,637.71	11.63	6,196.01
Express	133,910.82	7.70	4,102.26
Total	<u>\$1,741,566.94</u>	<u>100.00%</u>	<u>\$53,276.08</u>

4—Transportation Expenses.

(a) Station Expenses:

Divided between Intrastate and Interstate business on the basis of the number of passengers of each class handled after making an allowance of about ten cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals and each interstate passenger makes use of one terminal, as follows:

5806

	Intrastate.	Interstate	Total.
Number of Passengers Handled during the six months ended December 31, 1907.....	1,444,540	257,950	1,702,490
Add 100% to Intrastate business to represent use of two terminals	1,444,540	.....	1,444,540
Total	2,889,080	257,950	3,147,030
Percentage of each	91.80%	8.20%	100.00%
Expenses—Divided on above Percentages (after allowing \$2,325.00 as cost of handling the mails)	\$52,377.81	\$4,678.63	\$57,056.44

(b) Yard and Train Expenses:

Divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

	Percentage.	Expenses.
Coach	56.77%	\$311,706.90
Pullman	21.15	116,128.25
Mail	11.75	64,515.70
Express	10.33	56,718.91
Total	100.00	\$549,069.76

(c) Loss and Damage—Baggage:

Expenses divided between intrastate and interstate business in proportion to the gross earnings of each, as follows:

	Earnings.	Percentage.	Expenses.
Intrastate	\$836,542.20	59.54%	\$984.39
Interstate	568,476.21	40.46	668.92
Total	<u>\$1,405,018.41</u>	<u>100.00%</u>	<u>\$1,654.31</u>

(d) Supervision and General:

Expenses divided between Coach, Pullman, Intrastate, Interstate, Mail, and Express business on the basis of the direct charges as apportioned above, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$311,706.90	51.09%	\$20,679.22
Pullman	116,128.25	19.03	7,702.59
Intrastate	53,362.20	8.75	3,541.66
Interstate	5,347.55	.88	356.19
Mail	66,840.70	10.95	4,432.13
Express	56,718.91	9.30	3,764.27
Total	<u>\$610,104.51</u>	<u>100.00%</u>	<u>\$40,476.06</u>

5807

5—General Expenses.

Divided between all classes of service on the basis of the direct charges to each class, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$810,496.95	53.42%	\$85,881.83
Pullman	273,188.56	18.00	28,938.10
Intrastate	82,492.36	5.44	8,745.74
Interstate	23,093.05	1.52	2,443.66
Mail	176,406.88	11.63	18,697.22
Express	151,594.99	9.99	16,060.64
Total	\$1,517,272.79	100.00%	\$160,767.19

6—Total Operating Expenses.

The total operating expenses are, as hereinbefore explained, divided between Coach, Pullman, Intrastate, Interstate, Mail, and Express business. The amounts charged to intrastate and interstate business are expenses not chargeable to the cost of train service. The expenses charged to mail and express business represent the total operating expenses assignable to those two classes of business. The expenses charged to coach and Pullman service represent the proportion of train expenses assignable to the hauling of passengers.

7—Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.

The cost of coach service, \$896,378.78, is divided between intrastate and interstate business in proportion to the total passenger miles of each class of traffic during the six months ended December 31, 1907, as follows:

	Passenger Miles.	Percentage.	Coach Service.
Intrastate	43,355,996	58.71%	\$526,263.98
Interstate	30,486,624	41.29%	370,114.80
Total	73,842,620	100.00%	\$896,378.78

The cost of Pullman service, \$302,126.66, is divided between intrastate and interstate business on the basis of 25% intrastate and 75% interstate, as follows:

	Percentage.	Pullman Service.
Intrastate	25%	\$75,531.67
Interstate	75	226,59.99
Total	100%	\$302,126.66

8—Total Cost of Intrastate, Interstate, Mail and Express Business.

5808

The cost of Coach and Pullman service divided as above and added to the other costs of intrastate and interstate business gives the total cost of these two classes of business for the six months ended December 31, 1907. The cost of Mail and Express business was ascertained before making the division of Coach and Pullman expenses. These costs are carried to the 'Statement of Revenue, Expenses, Etc.,' as item 2a (Operating Expenses) in columns #4, 5, 6, and 7.

Miscellaneous Revenue, Taxes, Rentals, Hire of Equipment, Dining Car Deficit, and Value of Property.

Miscellaneous revenue and dining car deficit are divided between intrastate and interstate business in proportion to the gross earnings of each class, as follows:

	Gross Earnings.	Percentage.	Miscellaneous Revenue.	Dining-car deficit.
Intrastate	\$836,542.20	59.54%	\$22,170.87	\$704.89
Interstate	568,476.21	40.46	15,066.07	479.01
Total	<u>\$1,405,018.41</u>	<u>100.00%</u>	<u>\$37,236.94</u>	<u>\$1,183.90</u>

Taxes, Rentals, Hire of Equipment, and value of Property are divided between intrastate, interstate, mail, and express business in proportion to the total earnings of each class, including the miscellaneous earnings above apportioned, as follows:

	Total Earnings.	Percentage.	Taxes.	Rentals.	Hire of equipment.	Value of property.
Intrastate.....	\$858,713.07	48.28%	\$28,582.96	\$2,821.46	*\$499.21	\$2,572,459.62
Interstate.....	583,542.28	32.80	19,418.42	1,916.81	*339.15	1,747,652.76
Mail.....	202,637.71	11.39	6,743.16	665.63	*117.77	606,883.08
Express.....	133,910.82	7.53	4,457.95	440.05	*77.86	401,214.19
Total...	<u>\$1,778,803.88</u>	<u>100.00%</u>	<u>\$59,292.49</u>	<u>\$5,843.95</u>	<u>*\$1,033.99</u>	<u>\$5,328,209.65</u>

*In red ink in copy.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follow pasters, marked pp. 5809-5812.)

5809

EXHIBIT "N."

5810

EXHIBIT "N."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Statement of Revenue, Expenses, and Net Earnings in Arkansas for the Six Months Ended December 31, 1907, with Miscellaneous Earnings, Taxes, Rentals, Hire of Equipment, Dining Car Deficit, and Value of Property Divided between the Various Classes of Business on a Gross Revenue Basis.

	Freight.			Passenger.					Total Business.
	Intrastate. (1)	Interstate. (2)	Total. (3)	Intrastate. (4)	Interstate. (5)	Mail. (6)	Express. (7)	Total. (8)	(9)
1. Revenue:									
(a) Freight, Passenger, Mail and Express	\$640,248.17	\$4,133,210.33	\$4,773,458.50	\$836,542.20	\$568,476.21	\$202,637.71	\$133,910.82	\$1,741,566.94	\$6,515,025.44
(b) Miscellaneous	16,469.41	106,345.00	122,814.41	22,170.87	15,066.07	.....	.....	37,236.94	160,061.35
Total Revenue	\$656,717.58	\$4,239,555.33	\$4,896,272.91	\$858,713.07	\$583,542.28	\$202,637.71	\$133,910.82	\$1,778,803.88	\$6,675,076.79
2. Expenses:									
(a) Operating Expenses	\$393,648.77	\$2,680,194.65	\$3,073,843.40	\$693,033.75	\$622,246.60	\$195,104.10	\$167,655.63	\$1,678,039.98	\$4,751,883.38
(b) Taxes	21,851.02	141,094.67	162,945.69	28,582.96	19,418.42	6,743.16	4,457.95	59,202.49	222,148.18
(c) Rentals	2,156.94	13,927.62	16,084.56	2,821.46	1,916.81	665.63	440.05	5,843.95	21,928.51
(d) Hire of Equipment.....	24,029.57	155,161.89	179,191.46	*499.21	*339.15	*117.77	*77.86	*1,033.99	178,157.47
(e) Dining Car Deficit.....	.....	.....	.....	704.89	479.01	.....	.....	1,183.90	1,183.90
Total Expenses.....	\$441,686.28	\$2,990,378.83	\$3,432,065.11	\$724,643.87	\$643,721.59	\$202,395.12	\$172,475.77	\$1,743,236.33	\$5,175,301.44
3. Net Earnings	\$215,031.30	\$1,249,176.50	\$1,464,207.80	\$134,069.22	*\$60,179.31	\$242.59	*\$39,564.95	\$35,567.55	\$1,499,775.35
4. Assessed Value of Property Doubled.....	\$1,996,596.20	\$12,698,486.15	\$14,695,072.35	\$2,572,459.62	\$1,747,652.76	\$606,883.08	\$401,214.19	\$5,328,209.65	\$19,993,282.00
5. Percentage of Net Earnings to Valuation.	10.93%	9.84%	9.98%	5.21%	*3.44%	.04%	*9.01%	.67%	7.50%

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Felld, Clerk. By W. Presley Felld, D. C.

5811

5812

EXHIBIT "O."

EXHIBIT "O."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Summary of Revenue, Expenses, and Net Earnings in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Intrastate, Interstate, Mail, and Express Business.

	Intrastate.			Interstate.			Mail	Express	Total
	Freight. (1)	Passenger. (2)	Total. (3)	Freight. (4)	Passenger. (5)	Total. (6)	business. (7)	business. (8)	business. (9)
1. Revenue	\$656,717.58	\$858,713.07	\$1,515,430.65	\$4,239,555.33	\$583,542.28	\$4,823,097.61	\$202,637.71	\$133,910.82	\$6,675,076.79
2. Expenses	441,686.28	724,643.85	1,166,330.13	2,990,378.83	643,721.59	3,634,100.42	202,395.12	172,475.77	5,175,301.44
3. Net Earnings	\$215,031.30	\$134,069.22	\$349,100.52	\$1,249,176.50	*\$60,179.31	\$1,188,997.19	\$242.59	*\$38,564.95	\$1,490,775.35
4. Assessed Value of Property Doubled.....	\$1,966,586.20	\$2,572,459.62	\$4,539,045.82	\$12,698,486.15	\$1,747,652.76	\$14,446,138.91	\$606,883.08	\$401,214.19	\$19,993,282.00
5. Percentage of Net Earnings to Valuation.....	10.93%	5.21%	7.69%	9.84%	*3.44%	8.23%	.04%	*9.61%	7.50%

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Felld, Clerk, by W. Presley Felld, D. C.

5813

EXHIBIT "P."

5814

EXHIBIT "P."

State of Arkansas—Rate Matter.
 St. Louis Southwestern Railway Company.
Freight Statistics—October, 1908.

Ton-miles of Freight Carried:		Local trains.	Through trains.	Total.
Interstate:				
Carload	1,816,989	24,802,246	26,619,235	
Less-than-carload	419,372	2,048,658	2,468,030	
Total	2,236,361	26,850,904	29,087,265	
Percentage of each	7.69%	92.31%	100.00%	
Intrastate:				
Carload	982,914	275,587	1,258,501	
Less-than-carload	101,666	21,136	122,802	
Total	1,084,580	296,723	1,381,303	
Percentage of each	78.52%	21.48%	100.00%	
Total Revenue Freight.....		3,320,941	27,147,627	30,468,568
Percentage of each.....		10.90%	89.10%	100.00%

Ton-mileage on each class of Train—Expressed in Percentages:

Interstate:			
Carload	54.71%	91.36%	87.37%
Less-than-carload	12.63	7.55	8.10
Total	67.34%	98.91%	95.47%
Intrastate			
Carload	29.59%	1.02%	4.13%
Less-than-carload	3.07	.07	.40
Total	32.66%	1.09%	53%
Total Revenue Freight.....		100.00%	100.00%
Mileage Statistics:			
Car-Miles	406,532	2,201,441	2,607,973
Caboose-Miles	24,379	68,118	92,497
Engine-Miles	25,797	68,118	93,915
Total	456,708	2,337,677	2,794,385
Percentage of each class.....	16.34%	83.66%	100.00%
Train-Miles (also Locomotive-Miles)		68,118	93,915
Percentage of each class	27.47	72.53%	100.00%
Freight-Car and Caboose-Miles.....		2,269,559	2,700,470
Percentage of each class.....	15.96%	84.04%	100.00%
Average number of cars per train.....	16.8	33.3	28.8

Number of trains run.....	450	639	1,089
Average length of run in miles.....	57.3	106.6	86.2
Average loading of revenue freight (considering all cars)—in tons.....	8.17	12.33	11.68
Average loading of revenue freight (loaded cars only)—in tons:			
Less-than-carload	4.07	7.04	6.14
Carload	20.11	19.65	19.70
Total	12.43	17.29	16.58
Number of cars handled in and out of terminals where yard engines are maintained.....	4,333	30,639	34,972
Percentage of each.....	12.39%	87.61%	100.00%

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

5815

5816

EXHIBIT "Q."

EXHIBIT "Q."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Statement of Freight Operating Expenses for the Six Months Ended December 31, 1907, Divided between Local and Through Train Service and between Intrastate and Interstate Business.

	Train Costs.		Other Costs.		Total. (5)
	Local. (1)	Through. (2)	Intrastate. (3)	Interstate. (4)	
1. Maintenance of Way and Structures.....	\$30,978.51	\$143,273.84	.....	.....	\$174,252.35
2. Maintenance of Equipment:					
(a) Locomotives:					
(1) Yard	\$666.33	\$4,711.65	.....	.....	\$5,377.98
(2) Road	21,571.40	32,541.52	.....	.....	54,112.92
(b) Freight Cars	46,317.70	135,462.92	.....	.....	181,780.62
(c) Supervision and General.....	5,390.03	13,582.26	.....	.....	19,972.29
Total Maintenance of Equipment....	\$73,945.46	\$186,298.35	.....	.....	\$260,243.81
3. Traffic Expenses .....	.....	.....	\$5,949.70	\$73,963.18	\$59,812.88
4. Transportation Expense:					
(a) Station Expenses .....	.....	.....	\$15,738.20	\$31,780.52	\$47,518.72
(b) Yard and Terminal Expenses.....	\$9,144.70	\$47,320.72	.....	.....	56,465.42
(c) Fuel and Locomotive Expenses.....	21,923.95	55,958.03	.....	.....	77,882.98
(d) Enginehouse Expenses—Road	4,505.35	5,947.89	.....	.....	10,453.24
(e) Road Enginemen and Trainmen	51,837.17	78,243.56	.....	.....	130,080.73
(f) Other Train Expenses	8,186.55	21,617.24	.....	.....	29,801.79

(g) Loss and Damage—Freight.....	.....	1,310.37	17,166.23	18,976.06
(h) Supervision and General.....	9,374.48	787.17	2,193.42	16,642.07
Total Transportation Expenses.....	\$218,460.52	\$18,335.74	\$51,140.23	\$387,821.21
5. General Expenses	\$10,220.98	\$1,206.09	\$5,242.54	\$44,017.99
6. Total Operating Expenses.....	\$215,029.67	\$25,391.53	\$110,345.95	\$926,128.24
7. Division of Train Costs Between Intrastate and Interstate Business:				
(a) Local Trains:				
(1) Intrastate Freight—31.99% of Total	*\$68,787.99	68,787.99	.....	.....
(2) Interstate Freight—68.01% of Total	*146,241.68	.....	146,241.68	.....
(b) Through Trains:				
(1) Intrastate Freight—1.06% of Total	*\$6,098.83	6,098.83	.....	.....
(2) Interstate Freight—98.94% of Total	*569,262.26	.....	569,262.26	.....
8. Total Cost of Intrastate and Interstate Business .....	.....	\$100,278.35	\$825,949.89	\$926,128.24

[* Figures in red ink.]

Endorsed: Filed July 18th, 1910. W. P. Feld, Clerk. By W. Presley Feld, D. C.

5817

EXHIBIT "R."

5818

EXHIBIT "R."

State of Kansas—Rate Matter.

St. Louis Southwestern Railway Company.

Bases Used in Arriving at Cost of Local and Through Freight Service and Intrastate and Interstate Freight Business in Arkansas—for the Six Months Ended December 31, 1907.

1—Maintenance of Way and Structures.

The proportion of these expenses applicable to the freight business as shown by the statements in this case, submitted by the Company, has been divided between local and through train service on the basis of the total engine and car miles of each class during the month of October, 1908, that month being considered representative of the business for the six months ended December 31, 1907. In arriving at the number of engine and car miles, we have added 50% to the engine mileage of local trains for station switching, and have assumed that each engine mile was equivalent to $2\frac{1}{2}$ car miles. The total engine and car miles, with the percentage and amount of expenses chargeable to each class of service on this basis, are as follows:

	Local.	Through.	Total.
Engine Miles	25,797	68,118	93,915
50% added to Local Engine Miles for Station Switching.	12,899	.....	12,899
Total	38,696	68,118	106,814

Engine Miles as above multiplied by $2\frac{1}{2}$ to get equivalent in car miles	96,740	170,295	267,035
Car Miles	406,532	2,201,441	2,607,973
Caboose Miles	24,379	68,118	92,497
Total	527,651	2,439,854	2,967,505
Percentage of each	17.78%	82.22%	100.00%
Expenses—Divided on above Percentages	\$30,978.51	\$143,253.84	\$174,232.35

2—Maintenance of Equipment.

(a) Locomotives:

The expenses under this head are divided between yard, and local and through road locomotives on the basis of the locomotive mileage of each class during the month of October, 1908. We have added 50% to the mileage made by yard locomotives to provide for the possible extra maintenance due to yard service; have added 50% to the mileage of road locomotives in local service to provide for the possible extra switching mileage, and again have added 50% to the switching mileage of the local train engines thus ascertained to provide for the possible extra maintenance due to switching service (making 75% added to the local engine mileage). The division between yard, and local and through road locomotives on this basis is as follows:

	Mileage.	Percentage.
Yard Locomotive Mileage	7,507	
50% added for extra repairs	3,754	
Local Locomotive Mileage	25,797	
75% added for extra mileage and repairs	19,348	
Through Locomotive Mileage		9.04%
	11,261	
	45,145	36.26
	68,118	54.70
Total	124,524	100.00%

The total expenses under this head amount to \$59,490.90. The amount chargeable to yard locomotives on this basis is 9.04%, or \$5,377.98; the amount chargeable to the local service is 36.26%, or \$21,571.40, and the amount chargeable to through service is 54.70%, or \$32,541.52.

The expense of maintenance of yard locomotives (\$5,377.98) is divided between local and through service on the basis of the number of cars of each class of service handled by yard engines during the month of October, 1908. The total number of cars handled at terminals, where yard engines were maintained, together with the percentage and amount of expense chargeable to each class of service, is as follows:

	Local.	Through.	Total.
Cars Handled	4,333	30,639	34,972
Percentage of each	12.39%	87.61%	100.00%
Expenses—Divided on above percentages.....	\$666.33	\$4,711.65	\$5,377.98

(b) Freight Cars:

The total amount of expense for maintenance of freight cars is \$181,780.62. This amount is apportioned to Arkansas by the Railway Company on a car mileage basis. In dividing this expense between local and through service, however, we have taken into consideration the element of repairs due to the stopping and starting of trains at way stations, and repairs due to extra terminal handling of cars in local service. Mr. A. M. Wellington, in his work on "Railway Location" (Page 203) says that the stopping and starting at way stations is the cause of approximately 21.5% of the repair expenses of freight cars, and that the terminal handling is the cause of approximately 13.5% of the repair expenses. Taking these elements into consideration, the maintenance expenses may be divided as follows:

Stopping and starting	21.5%	\$39,082.83
Terminal Handling	13.5	24,540.39
Other Expenses	65%	\$63,623.22
Total		118,157.40
		<u>\$181,780.62</u>

5820

Assuming that each local train makes a stop, say, each five miles and each through train a stop, say, each twenty miles the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expenses due to stopping and starting. Assuming also that each car in local service received four terminal handlings (including handling at local stations) to each terminal handling of a car in through service, the local service should be charged with four times as much as the through service, in proportion to car mileage, for the expenses due to terminal handling. Both of these items may, therefore, be divided between local and through service on the following basis:

	Local.	Through.	Total.
Car Miles (October, 1908)	430,911	2,269,559	2,700,470
Same, with local car miles multiplied by four	1,723,644	2,269,559	3,993,203
Percentage of each	43.16%	56.84%	100.00%
Expenses—Divided on above Percentages	\$27,459.78	\$36,163.44	\$63,623.22

The balance of the expenses of freight car maintenance, \$118,157.40, is divided between local and through service in proportion to the number of car miles made in each class of service, as follows:

	Local.	Through.	Total.
Car Miles (October, 1908)	430,911	2,269,559	2,700,470
Percentage of each	15.96%	84.04%	100.00%
Expenses—Divided on above Percentages	\$18,857.92	\$99,299.48	\$118,157.40

The total expenses of maintenance of freight cars chargeable to each class of service, under the plans outlined above, are as follows:

	Local.	Through.	Total.
Stopping and Starting and Terminal Handling.....	\$27,459.78	\$36,163.44	\$63,623.22
Other Expenses	18,857.92	99,299.48	118,157.40
Total	<u>\$46,317.70</u>	<u>\$135,462.92</u>	<u>\$181,780.62</u>

(c) Supervision and General:

The total expenses under this head are divided between local and through service on the basis of the direct charges for maintenance of equipment, as follows:

	Local.	Through.	Total.
Direct Expenses	\$68,555.43	\$172,716.09	\$241,271.52
Percentage of each	28.41%	71.59%	100.00%
Expenses—Divided on above percentages.....	\$5,390.03	\$13,582.26	\$18,972.29

5821

3—Traffic Expenses.

These expenses are incurred in securing and looking after traffic. The amount apportioned to the State of Arkansas is based on the revenue train mileage in that State as compared with the revenue train mileage of the whole road. We have divided these expenses on a straight revenue basis, although of the opinion that this unduly burdens the intrastate business, owing to the fact that a considerable portion of the traffic expense is incurred in the effort to secure competitive business, while it is well known that intrastate business is largely noncompetitive. The basis of dividing these expenses between intrastate and interstate business is as follows:

	Intrastate.	Interstate.	Total.
Total Freight Revenue.....	\$175,515.42	\$1,619,840.07	\$1,795,355.49
Percentage of each	9.78%	90.22%	100.00%
Expenses—Divided on above Percentages.....	\$5,849.70	\$53,963.18	\$59,812.88

4—Transportation Expenses.

(a) Station Expenses:

These expenses cannot be divided between the two classes of train service, as they are not train expenses. They may, however, be divided between intrastate and interstate business in proportion to the volume of traffic of each class handled in the State. We have divided the expenses between the intrastate and interstate business on the basis of the number of tons of each class of traffic, assuming, however, that each intrastate ton was handled twice and each interstate ton once, as follows:

	Intrastate.	Interstate.	Total.
Total Tons	197,600	797,865	995,465
Double number of Intrastate Tons in order to provide for two handlings	197,600	.....	197,600
Total	395,200	797,865	1,193,065
Percentage of each	33.12%	66.88%	100.00%
Expenses—Divided on above Percentages	\$15,738.20	\$31,780.52	\$47,518.72

(b) Yard and Terminal Expenses:

These expenses are divided between local and through business on the basis of the number of cars handled at terminals, as explained under the head of Maintenance of Yard Locomotives (2a). Of the total expenses, 5822 \$2,452.50 are the expenses of the Little Rock Terminals, and are charged entirely to local trains; of the balance of these expenses, 12,39%, or \$6,692.20 are charged to local trains; and 87.61%, or \$47,320.72, are charged to through trains. The \$2,452.50 of Little Rock expenses, and \$6,692.20 of other expenses, make \$9,144.70 of yard expenses charged to local trains.

(c) Fuel and Locomotive Expenses:

The Railway Company ascertained the actual consumption of fuel by local and through engines during the month of October, 1908. The value of the fuel consumed was as follows:

	Local engines.	Through engines.	Total.
Total Amount	\$3,868.72	\$9,873.40	\$13,742.12
Percentage of each	28.15%	71.85%	100.00%

We have used these percentages in dividing fuel and the miscellaneous locomotive expenses for the six months ended December 31, 1907, amounting to \$77,882.58. The amount charged to local service is 28.15%, or \$21,923.95; and the amount charged to through service is 71.85%, or \$55,958.63.

(d) Enginehouse Expenses—Road:

These expenses, amounting to \$10,453.24, are divided between local and through service on the basis of the engine miles of each class of service during the month of October, 1908, assuming, however, that the local engines require twice as much enginehouse service per engine mile as the through engine. This assumption is based on the average engine run in the two classes of service. The engine miles and the percentages on which the expenses are divided, are as follows:

	Local.	Through.	Total.
Total Engine Miles.....	25,797	68,118	93,915
100% Added to Local Engine Miles to Cover Extra Expenses..	25,797	.....	25,797
Total	51,594	68,118	119,712
Percentage of each.....	43.10%	56.90%	100.00%
Expenses—Divided on above Percentages.....	\$4,505.35	\$5,947.89	\$10,453.24

(e) Road Enginemen and Trainmen:

The Railway Company made an actual division of these expenses during the month of October, 1908, as follows:

	Local.	Through.	Total.
Total Amount	\$9,025.75	\$13,625.21	\$22,650.96
Percentage of each	39.85%	60.15%	100.00%

We have used these percentages in dividing the total expenses under this head for the six months ended December 31, 1907. These expenses amounted to \$130,080.73, of which 39.85%, or \$51,837.17, are charged to local service, and 60.15%, or \$78,243.56, are charged to through service.

(f) Other Train Expenses:

These expenses are such as are incident to or generally caused by the operation of trains, and not included in the preceding classifications. They are divided between local and through service in proportion to the train miles of each class of service during the month of October, 1908, as follows:

	Local.	Through.	Total.
Train Miles	25,797	68,118	93,915
Percentage of each	27.47%	72.53%	100.00%
Expenses—Divided on above percentages.....	\$8,186.55	\$21,615.24	\$29,801.79

(g) Loss and Damage—Freight:

The expenses under this head are divided between intrastate and interstate business on the basis of the actual claims paid during the month of October, 1908, as follows:

	Intrastate.	Interstate.	Total.
Claims Paid	\$471.22	\$4,468.99	\$4,940.21
Percentage of each	9.54%	90.46%	100.00%
Expenses—Divided on above Percentages.....	\$1,810.37	\$17,166.29	\$18,976.66

(h) Supervision and General:

These expenses are divided between local, through, intrastate, and interstate business on the basis of the direct charges to each of these classes, as follows:

Direct Expenses	Train costs.		Other costs.		Total.
	Local.	Through.	Intrastate.	Interstate.	
.....	\$95,597.72	\$209,086.04	\$17,548.57	\$48,946.81	\$371,179.14
Percentage of each	25.76%	56.33%	4.73%	13.18%	100.00%
Expenses—Divided on above Per-					
centages	\$4,287.00	\$9,374.48	\$787.17	\$2,193.42	\$16,642.07

5824

5—General Expenses.

These expenses are general to all classes of service. They may, therefore, be apportioned to local and through and intrastate and interstate business on the basis of the direct charges for all other expenses of these classes that being perhaps the best measure of the supervision necessary for each. The total direct charges and the percentage of general expenses applicable to each, are as follows:

Direct Expenses	Train costs.		Other costs.		Total.
	Local.	Through.	Intrastate.	Interstate.	
.....	\$204,808.69	\$548,012.71	\$24,185.44	\$105,103.41	\$882,110.25
Percentage of each	23.22%	62.13%	2.74%	11.91%	100.00%
Expenses—Divided on above Per-					
centages	\$10,220.98	\$27,348.38	\$1,206.09	\$5,242.54	\$44,017.99

6—Total Operating Expenses.

The total freight operating expenses are, as hereinbefore explained, divided between local and through train service and intrastate and interstate business. The train costs are intended to include everything relating to the direct cost of the movement of freight trains, with all expenses incident to such movement. Station expenses and other items which do not affect the expenses of train operation are divided between intrastate and interstate business direct.

7—Method of Dividing Train Costs.

During the month of October, 1908, 78.52% of all intrastate ton-miles and 7.69% of all interstate ton-miles of freight were handled on local trains; and 21.48% of all intrastate and 93.31% of all interstate ton-miles were handled on through trains. Assuming that these same relative conditions would exist during the six months ended December 31, 1907, the total ton-miles of intrastate and interstate freight handled during that period would have been divided between local and through service as follows:

Local Trains:

Intrastate Business—78.52% of 8,512 ton-miles during six months' period	6,884,256
Interstate Business—7.69% of 184,831,455 ton-miles, during six months' period	14,213,539
Total	<u>20,897,795</u>

5825 Through Trains:

Intrastate Business—21.48% of 8,512,807 ton-miles during six months' period	1,828,551
Interstate Business—92.31% of 184,831,455 ton-miles during six months' period	170,617,916
Total	<u>172,446,467</u>

In the accompanying statement, train costs are divided between intrastate and interstate business in proportion to the volume of traffic of each kind handled in each class of service, as hereinbefore ascertained. The percentages used and the train costs divided, are as follows:

	Ton miles.	Percentage.	Train costs. Divided.
Local Trains:			
Intrastate business	6,684,256	31.99%	\$68,787.99
Interstate business	14,213,539	68.01	146,241.68
Total	20,897,795	100.00%	\$215,029.67
Through Trains:			
Intrastate business	1,828,551	1.06%	\$6,098.83
Interstate business	170,617,916	98.94	569,262.26
Total	172,446,467	100.00%	\$575,361.09

8—Total Cost of Intrastate and Interstate Business.

The total cost of these two classes of business is ascertained in the manner hereinbefore explained. These costs are carried into the "Statement of Revenue, Expenses, etc.," as item 2a (Operating Expenses) in columns #1 and #2.

Miscellaneous Revenue, Taxes, and Rentals and Value of Property.

In the "Statement of Revenue, Expenses, Etc.," the items under this head have been divided between intrastate and interstate business on a straight revenue basis, as follows:

EXHIBIT "S."

EXHIBIT "S."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Statement of Passenger Operating Expenses in Arkansas—for the Six Months Ended December 31, 1907—Divided Between Train and Other Costs and Between Intrastate, Interstate, Mail, and Express Business.

	Train costs.		Other costs.		Train and other costs.		Total.
	Coach. (1)	Pullman. (2)	Intrastate. (3)	Interstate. (4)	Mail. (5)	Express. (6)	
1. Maintenance of Way and Structures.....	\$82,202.54	\$22,058.67	.....	.....	\$13,181.87	\$9,549.87	\$126,992.95
2. Maintenance of Equipment:							
(a) Locomotives	\$29,431.20	\$7,897.73	.....	.....	\$4,719.54	\$3,419.17	\$45,467.64
(b) Passenger Train Cars.....	26,334.42	.....	.....	.....	4,226.01	3,059.41	33,619.84
(c) Supervision and General.....	7,762.84	1,099.86	.....	.....	1,245.18	901.68	11,009.56
Total Maintenance of Equipment.....	\$63,528.46	\$8,997.59	.....	.....	\$10,190.73	\$7,380.26	\$90,097.04
3. Traffic Expenses .....	.....	.....	\$13,251.96	\$9,193.44	\$1,752.37	\$1,801.77	\$25,999.54
4. Transportation Expenses:							
(a) Station Expenses .....	.....	.....	\$22,974.45	\$1,868.16	\$1,149.75	.....	\$25,992.36
(b) Yard and Train Expenses.....	\$90,582.57	\$24,307.42	.....	.....	14,525.67	\$10,523.42	139,939.08
(c) Loss and Damage—Baggage.....	.....	.....	246.22	170.82	.....	.....	417.04
(d) Supervision and General.....	5,527.75	1,483.20	1,417.21	124.87	956.32	642.62	10,151.97
Total Transportation Expenses.....	\$96,110.32	\$25,790.62	\$24,637.88	\$2,163.85	\$16,631.74	\$11,166.04	\$176,500.45
5. General Expenses	\$13,326.07	\$3,132.69	\$2,087.69	\$626.54	\$2,300.39	\$1,646.10	\$23,119.48
6. Total Operating Expenses.....	\$255,167.39	\$59,979.57	\$39,977.53	\$11,983.83	\$44,057.10	\$11,544.04	\$442,709.46
7. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business:							
(a) Coach:							
(1) Intrastate—55.42% of Total.....	*\$141,413.77	.....	141,413.77	.....	.....	.....	.....
(2) Interstate—44.58% of Total.....	*113,753.62	.....	.....	113,753.62	.....	.....	.....
(b) Pullman:							
(1) Intrastate—25% of Total.....	.....	*\$14,994.89	14,994.89	.....	.....	.....	.....
(2) Interstate—75% of Total.....	.....	*44,984.68	.....	44,984.68	.....	.....	.....
8. Total Cost of Intrastate, Interstate, Mail and Express Business.....			\$196,386.19	\$170,722.13	\$44,057.10	\$31,544.04	\$442,709.46

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

	Intrastate.	Interstate.	Total.
Freight Revenue	\$173,064.45	\$1,597,230.02	\$1,770,294.47
Percentage of each	9.78%	90.22%	100.00%
Division of these Percentages:			
Miscellaneous Revenue	\$2,450.97	\$22,610.05	\$25,061.02
Taxes	\$5,495.26	\$50,993.51	\$56,188.77
Rentals (Credits in Red)	*5,547.49	*51,175.32	*56,722.81
Assessed Value of Property Doubled	\$538,274.14	\$4,905,551.28	\$5,503,825.42

[*In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follows paper, marked p. 5826.)

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Bases Used in Arriving at Cost of Intrastate and Interstate Passenger and Mail and Express Business in Arkansas—For the Six Months Ended December 31, 1907.

All passenger trains on the St. Louis Southwestern Railway Company do a local business, and it has, therefore, been unnecessary to make any division of expenses as between local and through service. Our statement of operating expenses covers the six months ended December 31, 1907, and the division of expenses is between Coach and Pullman service, and Intrastate, Interstate, Mail, and Express business. In general, the expenses are divided on a car-mile basis, the mileage used being that of October, 1908. As there is very little change in mileage from month to month, the figures used may be considered representative of the entire period. The Coach mileage includes the mileage of baggage and parlor cars. The various classes of expenses are divided as follows:

1. Maintenance of Way and Structures.

Expenses divided between Coach, Pullman, Mail and Express service on a car-mile basis, as follows:

	Car-Miles.	Percentage.	Expenses.
Coach	221,159	64.73%	\$82,202.54
Pullman	59,334	17.37%	22,058.67
Mail	35,480	10.38	13,181.87
Express	25,683	7.52	9,549.87
Total	341,656	100.00%	\$126,992.95

2. Maintenance of Equipment.

(a) Locomotives:

Expenses divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

	Percentage.	Expenses.
Coach	64.73	\$29,431.20
Pullman	17.37	7,897.73
Mail	10.38	4,719.54
Express	7.52	3,419.17
Total	100.00%	\$45,467.64

(b) Passenger Train Cars:

Expenses divided between Coach, Mail, and Express service on a car-mile basis, as follows:

	Car-Miles.	Percentage.	Expenses.
5829			
Coach	221,159	78.33%	\$26,334.42
Mail	35,480	12.57	4,226.01
Express	25,683	9.10	3,059.41
Total	282,322	100.00%	\$33,619.84

(c) Supervision and General:

Expenses divided between Coach, Pullman, Mail and Express service on the basis of the direct charges as apportioned above, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$55,765.62	70.51%	\$7,762.84
Pullman	7,897.73	9.99	1,099.86
Mail	8,945.55	11.31	1,245.18
Express	6,478.58	8.19	901.68
Total	\$79,087.48	100.00%	\$11,009.56

3. Traffic Expenses.

Expenses divided between Intrastate, Interstate, Mail, and Express business on a gross earning basis, as follows:

	Gross Earnings.	Percentage.	Expenses.
Intrastate	\$251,182.96	50.97%	\$13,251.96
Interstate	174,260.61	35.36	9,193.44
Mail	33,218.77	6.74	1,752.37
Express	34,155.57	6.93	1,801.77
Total	\$492,817.91	100.00%	\$25,999.54

4. Transportation Expenses.

(a) Station Expenses:

Divided between Intrastate and Interstate business on the basis of the number of passengers of each class handled after making an allowance of about ten cents per day for the handling of mails at certain stations; and assuming that each intrastate passenger makes use of two terminals and each interstate passenger makes use of one terminal, as follows:

	Intrastate.	Interstate.	Total.
Number of Passengers handled during the six months ended December 31, 1907.....	504,392	82,064	586,456
Add 100% to Intrastate business to represent use of two terminals	504,392	.....	504,392
Total	1,008,784	82,064	1,090,848
Percentage of each.....	92.48%	7.52%	100.00%
Expenses divided on above percentage (after allowing \$1,149.75 as cost of handling the mails).....	\$22,974.45	\$1,868.16	\$24,842.61

(b) Yard and Train Expenses:

Divided between Coach, Pullman, Mail and Express service on a car-mile basis, as in the case of Maintenance of Way and Structures, as follows:

5829½	Percentage.	Expenses.
Coach	64.73%	\$90,582.57
Pullman	17.37	24,307.42
Mail	10.38	14,525.67
Express	7.52	10,523.42
Total	100.00%	\$139,939.08

(c) Loss and Damage—Baggage:

Expense divided between intrastate and interstate business in proportion to the gross earnings of each, as follows:

	Earnings.	Percentage.	Expenses.
Intrastate	\$246,101.33	59.04%	\$246.22
Interstate	170,735.14	40.96	170.82
Total	\$416,836.47	100.00%	\$417.04

(d) Supervision and General:

Expenses divided between Coach, Pullman, Intrastate, Interstate Mail, and Express business on the basis of the direct charges as apportioned above, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$90,582.57	54.45%	\$5,527.75
Pullman	24,307.42	14.61	1,483.20
Intrastate	23,220.67	13.96	1,417.21
Interstate	2,038.98	1.23	124.87
Mail	15,675.42	9.42	956.32
Express	10,523.42	6.33	642.62
Total	\$166,348.48	100.00%	\$10,151.97

5. General Expenses.

Divided between all classes of service on the basis of the direct charges to each class, as follows:

	Direct Charges.	Percentage.	Expenses.
Coach	\$241,841.32	57.64%	\$13,326.07
Pullman	56,846.88	13.55	3,132.69
Intrastate	37,889.84	9.03	2,087.69
Interstate	11,357.29	2.71	626.54
Mail	41,756.71	9.95	2,300.39
Express	29,897.94	7.12	1,646.10
Total	\$419,589.98	100.00%	\$23,119.48

6. Total Operating Expenses.

The total operating expenses are, as hereinbefore explained, divided between Coach, Pullman, Intrastate, Interstate, Mail and Express business. The amounts charged to Intrastate, and Interstate business are expenses not chargeable to the cost of train service. The expenses charged to Mail and Express business represent the total operating expenses assignable to these two classes of business.

5830 The expenses charged to Coach and Pullman service represent the proportion of train expenses assignable to the hauling of passengers.

7. Division of Cost of Coach and Pullman Service Between Intrastate and Interstate Business.

The cost of Pullman service, \$59,979.57, is divided between Intrastate and interstate business in proportion to the total passenger miles of each class of traffic during the six months ended December 31, 1907, as follows:

	Passenger Miles.	Percentage.	Coach Service.
Intrastate	12,345,719	55.42%	\$141,413.77
Interstate	9,930,034	44.58	113,753.62
Total	22,275,753	100.00%	\$255,167.39

The cost of Pullman service, \$59,919.57, is divided between Intrastate and Interstate business on the basis of 25% Intrastate and 75% Interstate, as follows:

	Percentage.	Pullman Service.
Intrastate	25%	\$14,994.89
Interstate	75	44,984.68
Total	100%	\$59,979.57

8. *Total Cost of Intrastate, Interstate, Mail and Express Business.*

The cost of Coach and Pullman service divided as above and added to the other costs of Intrastate and Interstate business gives the total cost of these two classes of business for the six months ended December 31, 1907. The cost of Mail and Express business was ascertained before making the division of Coach and Pullman expenses. These costs are carried to the "Statement of Revenue, Expenses, etc.," as item 2a. (Operating Expenses) in columns #4, 5, 6 and 7.

Miscellaneous Revenue, Taxes, Rentals, Outside Operations, and Value of Property.

Miscellaneous Revenue and Outside Operations (Dining car deficit) are divided between Intrastate and Interstate business in proportion to the gross earnings of each class, as follows:

5831

	Gross Earnings.	Percentage.	Miscellaneous Revenue.	Outside Operations.
Intrastate	\$246,101.33	59.04%	\$5,081.63	\$811.38
Interstate	170,735.14	40.96%	3,525.47	562.91
Total	\$416,836.47	100.00%	\$8,607.10	\$1,374.29

Taxes, Rentals and Value of Property are divided between Intrastate, Interstate Mail and Express business in proportion to the total earnings of each class, including the miscellaneous earnings above apportioned, as follows:

	Total Earnings.	Percentage.	Taxes.	Rentals.	Value of Property.
Intrastate.....	\$251,182.96	59.97%	\$8,077.78	\$1,299.67	\$770,152.41
Interstate	174,260.61	35.36	5,603.89	901.64	534,286.62
Mail	33,218.77	6.74	1,068.16	171.86	101,840.83
Express	34,155.57	6.93	1,098.28	176.71	104,711.72
Total	\$492,817.91	100.00%	\$15,848.11	\$2,549.88	\$1,510,991.58

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

(Here follow pasters, marked pp. 5832-5835.)

5832

EXHIBIT "U."

5833

EXHIBIT "U."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Statement of Revenue, Expenses, and Net Earnings in Arkansas—for the Six Months Ended December 31, 1907—with Miscellaneous Earnings, Taxes, Rentals, Outside Operations, and Value of Property Divided Between the Various Classes of Business on a Gross Revenue Basis.

	Freight.			Passenger.					Total Business.
	Intrastate. (1)	Interstate. (2)	Total. (3)	Intrastate. (4)	Interstate. (5)	Mail. (6)	Express. (7)	Total. (8)	
1. Revenue:									
(a) Freight, Passenger, Mail, and Express.....	\$173,064.45	\$1,597,230.02	\$1,770,294.47	\$246,101.33	\$170,735.14	\$33,218.77	\$34,155.57	\$484,210.81	\$2,254,505.28
(b) Miscellaneous	2,450.97	22,610.05	25,061.02	5,081.63	3,525.47	.....	.....	8,607.10	33,668.12
Total Revenue.....	\$175,515.42	\$1,619,840.07	\$1,795,355.49	\$251,182.96	\$174,260.61	\$33,218.77	\$34,155.57	\$492,817.91	\$2,288,173.40
2. Expenses:									
(a) Operating Expenses	\$100,278.35	\$825,849.89	\$926,128.24	\$196,386.19	\$170,722.13	\$44,057.10	\$31,544.04	\$442,709.46	\$1,368,837.70
(b) Taxes	5,495.26	50,693.51	56,188.77	8,077.78	5,603.89	1,068.16	1,098.28	15,848.11	72,036.88
(c) Rentals	*5,547.49	*51,175.32	*56,722.81	1,299.67	901.64	171.86	176.71	2,549.88	*54,172.93
(d) Outside Operations .....	.....	.....	.....	811.38	562.91	.....	.....	1,374.29	1,374.29
Total Expenses.....	\$100,226.12	\$825,368.08	\$925,594.20	\$206,575.02	\$177,790.57	\$45,297.12	\$32,819.03	\$462,481.74	\$1,388,075.94
3. Net Earnings	\$75,289.30	\$794,471.99	\$869,761.29	\$44,607.94	*\$3,529.96	*\$12,078.35	\$1,336.54	\$30,336.17	\$900,097.46
4. Assessed value of property doubled.....	\$38,274.14	\$4,965,551.28	\$5,503,825.42	\$770,152.41	\$534,296.62	\$101,840.83	\$104,711.72	\$1,510,991.58	\$7,014,817.00
5. Percentage of net earnings to valuation.....	13.96%	16.00%	15.80%	5.79%	.66%	*11.86%	1.28%	2.01%	12.83%

[*Figures in red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5834

5835

EXHIBIT "V."

EXHIBIT "V."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Summary of Revenue, Expenses, and Net Earnings in Arkansas for the Six Months Ended December 31, 1907, Divided Between Intrastate, Interstate, Mail, and Express Business.

	Intrastate.			Interstate.			Mail	Express	Total
	Freight. (1)	Passenger. (2)	Total. (3)	Freight. (4)	Passenger. (5)	Total. (6)	business. (7)	business. (8)	business. (9)
1. Revenue	\$175,515.42	\$251,182.96	\$426,698.38	\$1,619,840.07	\$174,260.61	\$1,794,100.68	\$33,218.77	\$34,155.57	\$2,288,173.40
2. Expenses	100,226.12	206,575.02	306,801.14	825,368.08	177,790.57	1,003,158.65	45,297.12	32,819.03	1,388,075.94
3. Net Earnings	<u>\$75,289.30</u>	<u>\$44,607.94</u>	<u>\$119,897.24</u>	<u>\$794,471.99</u>	<u>*\$3,529.96</u>	<u>\$790,942.03</u>	<u>*\$12,078.35</u>	<u>\$1,336.54</u>	<u>\$900,097.46</u>
4. Assessed Value of Property Doubled.....	<u>\$538,274.14</u>	<u>\$770,152.41</u>	<u>\$1,308,426.55</u>	<u>\$4,965,551.28</u>	<u>\$534,286.62</u>	<u>\$5,499,837.90</u>	<u>\$101,840.83</u>	<u>\$104,711.72</u>	<u>\$7,014,817.00</u>
5. Percentage of Net Earnings to Valuation.....	13.99%	5.79%	9.16%	16.00%	*.66%	14.38%	*11.86%	1.28%	12.83%

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Felld, Clerk, by W. Presley Felld, D. C.

5836

EXHIBIT "W."

5837

EXHIBIT "W."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Tonnage Capacity of Engines in Freight Service as Shown by Official Time Cards (Issued for the Government of Employés Only), Effective During the Last Half of 1909, Compared on the Various Operating Districts Over Which So-called "Trans-state" Trains Would Pass Through the State of Arkansas. (As Various Classes of Engines With Varying Tonnage Ratings Are in Service on the Different Districts, the Maximum Rating on Each District Has Been Used Below as the Basis of Comparison.)

An engine hauling a train into Arkansas from the north on the main line could haul into Hoxie terminal 2,300 tons gross of trans-state freight, destined beyond Texarkana. From Hoxie to Argenta the maximum rating of any engine being 2,000 tons gross the train would have to be reduced 300 tons at Hoxie; from Argenta to Texarkana the maximum rating of any engine being 1,600 tons a further reduction of 400 tons would have to be made at Argenta.

It is apparent that on the main line in Arkansas the maximum possible gross tonnage of a train of trans-state freight would be 700 tons less South of Argenta than it was North of Hoxie.

An engine hauling a train into Arkansas from the north on the main line, consisting of trans-state freight only, destined to Louisiana points via Argenta and Alexandria could haul into Hoxie 2,300 tons gross. From Hoxie to Argenta 2,000 tons gross. From Argenta to Pine Bluff the maximum rating of any engine is shown as 2,000 tons gross; from Pine Bluff to McGehee 2,400 tons gross; and from McGehee to Riverton, Louisiana 1,800 tons gross.

It is apparent that in traversing the route indicated above a so-called "trans-state" train would be reduced 300 tons at Hoxie, and even if allowed to run from Pine Bluff to McGehee without being increased to the maximum rating for that portion of the line would have to be reduced 200 tons at McGehee. It will be noted that when the train went south from McGehee into Louisiana it could carry as a maximum 500 tons less than it contained when it came into the State.

Traffic from Louisiana Points to Points in Other States via Little Rock and Any Line of the Iron Mountain to the Arkansas Border.

The maximum rating for any engine from Riverton, Louisiana to McGehee, Arkansas, is shown as 1,800 tons gross. If a train of this weight were allowed to run unbroken and without increase of

tonnage from McGehee to Pine Bluff (although the maximum for that piece of road is 2,400 tons gross), assuming that 1,800 tons was the rating of the engine hauling the train when it reached Pine Bluff, its tonnage would have to be reduced to 1,550 tons, at Pine Bluff, unless a change of engines was effected at that point, and an engine of higher rating substituted. This procedure is improbable, however, as Pine Bluff is about the middle of a regular through freight division which extends from McGehee to Argenta.

A "trans-state" train coming into Arkansas from Oklahoma and beyond, destined beyond Texarkana via Argenta could not consist, according to the rating table, of more than 1,500 tons gross. This rating would apply as a maximum through Van Buren and as far south as Conway, from which latter point the rating to Argenta is given as 1,750 tons gross for an engine which could haul 1,500 tons to Conway. South of Argenta the maximum rating is given in the table as 1,600 tons gross. If no change were made in the train at Conway or Argenta the engine would not realize its full efficiency by 250 tons between Conway and Argenta, and by 100 tons between Argenta and Texarkana. On the other hand, if the tonnage were increased 250 tons at Conway it would have to be reduced 150 tons at Argenta.

"Trans-state Traffic to and from Memphis via Bald Knob.

Moving West from Memphis a train of trans-state freight reaching the main line at Bald Knob, and which if its engine had the highest tonnage rating on that line would carry out of Memphis 1,550 tons gross, would have to reduce at Levesque to 800 tons which rating would prevail as far as Crowley's from which point it would have to run light to Bald Knob or fill out at Crowley's to 1,550 tons the rating between Crowley's and Bald Knob.

Traffic moving in the opposite direction to that referred to in the preceding paragraph, would move under maximum tonnage rating of 1,550 tons from Bald Knob to Wynne, 800 tons from Wynne to Crowley's, and 1,550 tons from Crowley's to Memphis. Bald Knob to Memphis is one through freight division.

5839 Trans-state traffic coming into Arkansas via the White River division and destined to any point beyond the borders of Arkansas would be subjected to the following fluctuations in maximum engine rating between the Missouri-Arkansas State line and Newport on the main line. An engine could bring into Cotter from the North a maximum of 725 tons gross. (Cotter is the most Northerly terminal in Arkansas on the White River Division.)

From Cotter to Batesville the maximum rating for any engine is shown 1,400 tons gross and from Batesville to Newport the maximum rating of the same engine is but 700 tons gross.

From Cotter to Newport is one through freight division, and it is apparent that a "trans-state" train coming into Arkansas from the North on this division hauling the maximum tonnage of its engine as far as Cotter would either have to fill out 675 tons at Cotter or

run light that amount from Cotter to Batesville, and reduce 25 tons at the latter point to conform to the maximum rating between Batesville and Newport.

Fluctuation in Engine Tonnage Ratings Between the Termini of a Through Freight Division.

Such fluctuations occur on the White River Division at Batesville located between Cotter and Newport, the termini of a through freight division. It also occurs on the Central division at Conway, between Van Buren and Argenta, the termini of a through freight division. It also occurs at Pine Bluff, located between Argenta and McGehee, the termini of a through freight run on the Arkansas Division. It also occurs at Wynne, Levesque, and Crowley's all of which three points are located between Bald Knob and Memphis, the termini of a through freight run on the Memphis division.

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

5840 EXHIBIT "X."

5841 EXHIBIT "X."

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Station Expenses—Freight.

On the basis of the showing made by the St. Louis Southwestern Railway Company during the month of January, 1909 (Exhibit "A") 51.24% of the total interstate tonnage is trans-state tonnage. Deducting this proportion from the interstate tonnage for the six months ended December 31, 1907, leaves 389,039 tons of interstate freight. Assuming that this is the only interstate tonnage receiving station attention, the percentage on which the station expenses would be divided would be ascertained as follows:

Intra-state tons	197,600		
Doubled, to represent two handlings.	197,600		
		395,200 =	50.39%
Interstate tons (excluding trans-state).....	389,039 =	49.61%	
Total.....	784,239 =	100.00%	

50.39% amounts to 17.27% more than the percentage (33.12% used in our Exhibit "Q," and this would represent a total increase in intrastate expenses as follows:

Transportation Expenses:

Station	\$8,206.48	
Supervision and General.....	367.79	
		\$8,574.27
General Expenses		426.97
Total.....		\$9,001.24

This amount, \$9,001.24, deducted from net earnings of \$119,897.24, shown by Exhibit "V," would leave \$110,896.00 as the net earnings on State business, after making the above allowance for trans-state freight, and without considering any extra station service for cotton, grain, and lumber, practically all of which is interstate. \$110,896.00 equals an earning of 8.48% on the value of the property devoted to State business.

Terminal Handling of Trans-state Freight.

Conceding, for the sake of the argument, that a proportion of the trans-state cars on through trains do not receive as much terminal handling as we have assumed in Exhibit "R," and reducing the number of terminal handlings of cars in through service by 25% on that account, the result would be as follows:

Cars handled for local trains.....	4,333 =	15.86%
Cars handled for through trains.....	30,639	
Less 25%	7,660	
	22,979 =	84.14%
Total.....	27,312 =	100.00%

5842 15.86% amounts to 3.47% more than the percentage (12.39%) used in Exhibit "Q," and this would represent an increase in local train expenses as follows:

Maintenance:

Yard Locomotives	\$186.62	
Supervision and General.....	15.18	
		\$201.80

Transportation:

Yard and Terminal Expenses.....	\$1,959.35	
Supervision and General.....	88.20	
		2,047.55
General Expenses		110.04
Total.....		\$2,359.39

Of this increase, 30.93%, or \$729.76 would be chargeable to State business. This amount deducted from the \$110,896.00 of State earnings shown above, would leave net earnings of \$110,166.24, or 8.42% on the value of property devoted to State business.

Traffic Expenses.

On the other hand, if traffic expenses were divided between State and Interstate business on a ton-mile basis, the State expenses would be decreased by \$3,217.93, and the State earnings increased accordingly. This amount, added to the \$110,166.24 of State earnings shown above, would make the State earnings \$113,384.17, or 8.67% on the value of property devoted to State business.

Maintenance of Way Expenses.

If maintenance of way expenses had been apportioned on a gross-ton-mile basis instead of a car-mile basis, the amount chargeable to local service would have been 14.96% of the total expenses, instead of 17.78%, the percentage used in Exhibit "R." This decrease in percentage would have reduced local train expenses by \$5,159.85, of which 30.93%, or \$1,595.94, would be applicable to State business. This amount would increase the State earnings shown above to \$114,980.11, or 8.79% on the value of property devoted to State business.

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5843 EXHIBIT "Y."

5844 EXHIBIT "Y."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Station Expenses—Freight.

On the basis of the showing made by the St. Louis, Iron Mountain & Southern Railway Company during the month of October, 1907 (Exhibit #26), 42.62% of the total interstate tonnage handled during that month was trans-state tonnage. Deducting this proportion from the interstate tonnage for the six months ended December 31, 1907, leaves 1,571,713 tons of interstate business. Assuming that this is the only interstate tonnage receiving station attention, the percentage on which the station expenses would be divided would be ascertained as follows:

Intrastate tons	684,122		
Doubled, to represent two handlings	684,122		
		1,368,244 =	46.54%
Interstate tons (excluding trans-state).....	1,571,713 =	53.46%	
Total.....	2,939,957 =	100.00%	
162—813			

46.54% amounts to 13.23% more than the percentage (33.31%) used in our Exhibit "J," and this would represent a total increase in intrastate expenses as follows:

Transportation Expenses:

Station Expenses	\$30,908.84	
Supervision and General.....	937.34	
		<hr/>
		\$31,846.18
General Expenses		1,427.96
		<hr/>
Total.....		\$33,274.14

This amount, \$33,274.14, deducted from net earnings of \$349,100.52, shown by Exhibit "O," would leave \$315,826.38 as the net earnings on State business, after making the above allowance for trans-state freight, and without considering any extra station service for cotton, grain, and lumber, or for Memphis and Ft. Smith tonnage, practically all of which is interstate. \$315,826.38 equals an earning of 6.96% on the value of property devoted to State business.

Terminal Handling of Trans-state Freight.

Conceding, for the sake of the argument, that a proportion of the trans-state cars on through trains do not receive as much terminal handling as we have assumed in Exhibit "K," and reducing the number of terminal handlings of cars in through service by 5845 25% on that account, the result would be as follows:

Cars handled for local trains.....	32,232 =	24.35%
Cars handled for through trains....	133,482	
Less 25%	33,370	
	<hr/>	
	100,112 =	75.65%
	<hr/>	
Total.....	132,344 =	100.00%

24.35% amounts to 4.89% more than the percentage (19.46%) used in Exhibit "J," and this would represent an increase in local train expenses as follows:

Maintenance:

Yard Locomotives	\$3,380.74	
Supervision and General.....	315.48	
	<hr/>	
		\$3,696.22

Transportation:

Yard and Terminal Expenses.....	\$14,344.69	
Supervision and General.....	436.19	
	<hr/>	
		14,780.88
General Expenses		832.97
		<hr/>
Total.....		\$19,310.07

Of this increase, 21.04%, or \$4,062.84, would be chargeable to State business. This amount, deducted from the \$315,826.38 of State earnings shown above, would leave net earnings of \$311,763.54, or 6.87% on the value of property devoted to State business.

Traffic Expenses.

On the other hand, if traffic expenses were divided between State and Interstate business on a ton-mile basis, the State expenses would be decreased by \$5,717.25, and the earnings increased accordingly. This amount, added to the \$311,763.54 of State earnings shown above, would make the State earnings \$317,480.79, or 6.99% on the value of property devoted to State business.

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5846

EXHIBIT "Z."

5847-5856

EXHIBIT "Z."

State of Arkansas—Rate Matter.

Comparison of Revenue and Expenses per Train Mile for the Years Ended June 30, 1897 and 1907, as Shown by the Interstate Commerce Commission Reports for Those Years.

	Per Train Mile.		
	Operating Revenue.	Operating Expenses.	Net Revenue.
Entire United States:			
Year ended June 30, 1907.....	\$2.18	\$1.47	\$.71
Year ended June 30, 1897.....	1.38	.93	.45
Increase.....	\$.80	\$.54	\$.26
Percent of Increase.....	58%	58%	58%
Group 8:			
Year ended June 30, 1907.....	\$2.07	\$1.35	\$.72
Year ended June 30, 1897.....	1.31	.92	.39
Increase	\$.76	\$.43	\$.33
Percent of Increase	58%	47%	85%
St. Louis, Iron Mountain & Southern:			
Year ended June 30, 1907.....	\$2.17	\$1.36	\$.81
Year ended June 30, 1897.....	1.45	.97	.48
Increase	\$.72	\$.39	\$.33
Percent of Increase.....	50%	40%	69%
St. Louis Southwestern:			
Year ended June 30, 1907.....	\$2.65	\$1.57	\$1.08
Year ended June 30, 1897.....	1.55	1.14	.41
Increase	\$1.10	\$.43	\$.67
Percent of Increase.....	71%	38%	163%

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State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Statement Showing the Ton-miles and Percentages of Freight Taken up on the Company's Books and Records During the Month of October, 1908, and the Ton-miles and Percentages of Freight Actually Transported During that Month, as Shown by Exhibits 19 and 20.

Taken up on Company's Books and Records.

	Ton-miles.	Percentages.
Intrastate Freight	1,372,093	4.525%
Interstate Freight	28,952,919	95.475
Total.....	30,325,012	100.000%

Actually Transported (See Exhibits #19 and 20).

Intrastate Freight	1,381,303	4.534%
Interstate Freight	29,087,265	95.466
Total.....	30,468,568	100.000%

NOTE.—This shows a difference due to the "lap-over" at the beginning and end of the month of 9/1000 of one per cent.

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EXHIBIT "F-1."

5859

EXHIBIT "F-1."

5860

State of Arkansas—Rate Matter.

Freight and Passenger Statistics Compiled from the Report of the Interstate Commerce Commission, for the Entire United States, Group 8, St. Louis, Iron Mountain & Southern and St. Louis Southwestern Railway Companies, for the Period of Ten Years Ended June 30, 1907.

Year ended June 30.—	Freight statistics.			Passenger statistics.			
	Tons carried one mile (millions).	Freight train mileage (millions).	Average train load (tons).	Average receipts per ton-mile (cents).	Passengers carried one mile (millions).	Passenger train mileage (millions).	Passengers per train mile.
Entire United States:							
1897.....	95,139	464	204	.798	12,256	335	37
1898.....	114,077	503	226	.753	13,379	334	39
1899.....	123,667	507	243	.724	14,591	347	41
1900.....	141,596	492	270	.729	16,038	363	41
1901.....	147,077	491	281	.750	17,353	385	42
1902.....	157,289	499	296	.757	19,689	405	45
1903.....	173,221	526	310	.763	20,915	425	46
1904.....	174,522	535	307	.780	21,923	440	46
1905.....	186,463	546	322	.793	23,800	459	48
1906.....	215,877	594	344	.748	25,167	479	49
1907.....	236,901	629	357	.759	27,718	509	51
Increase in ten years—per cent....	148.7%	35.5%	75%	*4.9%	126.1%	51.9%	37.8%
							*.4%

Group 8:									
1897.....	6,333	41	151	1,079	652	24	26	2,315	
1898.....	8,243	49	166	,901	811	26	31	2,218	
1899.....	8,080	47	170	,908	892	27	33	2,217	
1900.....	9,170	45	186	,964	1,018	28	31	2,240	
1901.....	10,604	46	213	,971	1,183	31	34	2,290	
1902.....	11,426	49	216	,978	1,403	33	37	2,236	
1903.....	12,541	50	229	,962	1,476	36	38	2,232	
1904.....	12,985	52	229	,998	1,648	39	37	2,263	
1905.....	13,133	53	228	,988	2,006	44	41	2,108	
1906.....	15,589	58	246	,947	2,076	45	41	2,213	
1907.....	17,406	61	265	,966	2,295	49	42	2,291	
Increase in ten years—per cent....	174.8%	46.7%	75.3%	*10.5%	252%	100.7%	61.5%	*1%	
St. Louis, Iron Mountain & Southern:									
1897.....	1,007	4.7	1213	,818	76.5	2.8	27	2,374	
1907.....	2,408	6.4	374	,733	194.5	4.8	39	2,419	
Increase in ten years—per cent....	139.1%	36.2%	75.6%	*10.4%	154.2%	71.4%	44.4%	1.9%	
St. Louis Southwestern:									
1897.....	245	1.2	293	,972	17.9	.7	26	2,301	
1907.....	532	1.4	373	,979	48.8	1.2	41	2,320	
Increase in ten years—per cent....	117.1%	14.3%	88.7%	.7%	172.6%	71.4%	57.7%	.8%	

• These percentages represent decreases. [In red ink in copy.]

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5861
5862EXHIBIT "G-1."
EXHIBIT "G-1."

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway Company.

Cost and Net Earnings of Intrastate Freight Business in Arkansas for the Six Months Ended December 31, 1907, Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al. (170 Federal Reporter, 725).

Basis Outlined by Judge Farrington.

Class of freight.	Ton miles.	Percentage used for		Percentage used for transportation except transportation expenses (state cost- ing three times as much as interstate).
		all expenses except transportation (straight ton mile basis).	7.25%	19.00%
Intrastate	47,860,299	92.75	81.00	
Interstate	612,303,696			
Total.....	660,163,995	100.00%	100.00%	100.00%
Cost of Intrastate Freight.				
Transportation Expenses		All freight.	Intrastate freight.	
Maintenance of Way.....	\$553,395.11	\$1,576,064.30 × 19.00% =	\$299,452.22	
Maintenance of Equipment.....	723,431.33			
Traffic Expenses	88,734.42			
General Expenses	132,218.24			
Total.....		1,497,779.10 × 7.25% =	108,588.98	
		\$3,073,843.40	\$408,041.20	

Taxes, Rentals, and Hire of Equipment (See our Exhibit in this case)	48,037.53
Total Cost of Intrastate Freight.....	\$456,078.73
Total Revenue from Intrastate Freight.....	656,717.58
Net Earnings—Intrastate Freight.....	\$200,638.85
Net Earnings—Intrastate Passenger.....	134,069.22
Total Net Intrastate Earnings (7.37% on Value of Property)	\$334,708.07

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk. By W. Presley Feild, D. C.

EXHIBIT "H-1."

5863

EXHIBIT "H-1."

5864

State of Arkansas—Rate Matter.

St. Louis Southwestern Railway Company.

Cost and Net Earnings of Intrastate Freight Business in Arkansas for the Six Months Ended December 31, 1907, Using the Basis Outlined by Judge Farrington in the Case of Southern Pacific Company vs. Bartine et al. (170 Federal Reporter, 725).

	Class of freight.	Ton miles.	Percentage used for all expenses except transportation (straight ton mile basis).	Percentage used for transportation expenses (state cost- ing three times as much as interstate).
Basis Outlined by Judge Farrington.				
Intrastate	8,512,807		4.40%	12.13%
Interstate	184,831,455		95.60	87.87
Total.....	193,344,262		100.00%	100.00%

Cost of Intrastate Freight.

	All freight.	Intrastate freight.
Transportation Expenses	\$387,821.21 x 12.13% =	\$47,042.71
Maintenance of Way	\$174,232.35	
Maintenance of Equipment	260,243.81	
Traffic Expenses	59,812.88	
General Expenses	44,017.99	
Total	538,307.03 x 4.40% =	23,685.51
	<u>\$926,128.24</u>	<u>\$70,728.22</u>
Taxes, Rentals, and Hire of Equipment (See our Exhibit in this case)		*52.23
Total Cost of Intrastate Freight		\$70,675.99
Total Revenue from Intrastate Freight		175,515.42
Net Earnings—Intrastate Freight		\$104,839.43
Net Earnings—Intrastate Passenger		44,607.94
Total Net Intrastate Earnings (11.42% on Value of Property)		<u>\$149,447.37</u>

[* In red ink in copy.]

Endorsed: Filed July 18th, 1910. W. P. Feild, Clerk, by W. Presley Feild, D. C.

2865 EXHIBIT "I-1."

5866 EXHIBIT "I-1."

Def't's Exhibit I-1. T. F. Wharton, 6/22/10.

In the Circuit Court of the United States for the Western Division of
the Eastern District of Arkansas.

In Chancery.

WILBUR F. BOYLE, Complainant,

vs.

ST. LOUIS AND SAN FRANCISCO RAILROAD COMPANY and R. P.
Allen, John Crockett, and J. E. Hampton, Railroad Commission-
ers of the State of Arkansas, and W. W. Dickinson and T. H.
Bunch, Defendants.

Affidavit of E. K. Voorhees.

CITY OF ST. LOUIS,
State of Missouri, ss:

E. K. Voorhees, of lawful age, being first duly sworn on oath, deposes and says he resides at St. Louis, Mo., and that his occupation is that of general freight agent of the St. Louis and San Francisco Railroad Company, one of the defendants in the foregoing entitled case and that he has filled such position since July 1, 1904, and that his duties and employment as said general freight agent are to have general charge of the freight business of said railroad company under the supervision of the freight traffic manager of said railroad company and that prior to occupying such position he was in the service of said railroad company or of railroad companies owning and operating railroads which are now leased and operated by said defendant railroad company in the capacity of assistant general freight agent, commercial agent and local freight agent, for a period of about fifteen years and prior to that time he was in the service of said other railroad company or companies in the station service thereof for about six years.

Affiant states that he is acquainted now and has been for many years last past with the conditions existing upon the lines of railroads of said railroad company in the State of Arkansas, with reference to the transportation of freight, and the rates and earnings therefrom and the conditions surrounding such transportation, within the State of Arkansas.

Affiant states that in the early part of September 1908, he was directed and instructed by the freight traffic manager of said railroad company to prepare and submit a schedule of freight rates to be applied on the lines of said railroad company within the State of Arkansas to take the place of the Standard Freight Distance Tariff No. 3 of the Railroad Commission of Arkansas, the defendant rail-

road company having been enjoined in the Federal Courts from continuing the use of said Distance Tariff No. 3.

5867 Affiant further states that in the preparation of such tariff he took into consideration the rates in effect in other states where transportation conditions were somewhat similar to those existing in the State of Arkansas and also gave due consideration to the rates operated on interstate traffic to and from and through the State of Arkansas and other states similarly located, and further gave consideration to all other elements usually entering into the fixing of freight rates to the end that the schedule so prepared might contain rates which were reasonable, not alone from the standpoint of the carrier, but would be reasonable from the standpoint of the public and would not discriminate for nor against the citizens of the State of Arkansas nor the citizens of other states.

Affiant further states that he was directed and instructed to cooperate with the officials of other Arkansas railroads and to discuss and consider with them, in conference the schedule of rates which should be operated within the State of Arkansas in lieu of the said Standard Freight Distance Tariff No. 3.

Affiant states that early in September, 1908, he met representatives of the freight traffic departments of other railroads operating in the said State, in conference, and that said conference remained in session about fifteen days, and as a result the representative of each line recommended to his company the adoption of a schedule of charges to apply within the State of Arkansas in place of the said Standard Freight Distance Tariff No. 3.

Affiant states that the chief traffic officers of the lines named gave careful consideration to the schedule that was recommended and that before any schedule was adopted and published by the several lines conferences were held with a large number of Arkansas shippers who would be affected by the changes in rates, also with the Railroad Commission of Arkansas and that all objections which were offered by said shippers and receivers or the Railroad Commission of Arkansas were given due and proper consideration and a number of modifications were made in the rates first recommended before they were finally made effective by the several railroad companies, on November 2, 1908.

Affiant states that the representatives of the several lines discussed and considered the relations which should exist between the several class rates and after much study and comparison with the rates in other states and with the class rates applied on interstate traffic in various portions of the territory west of the Mississippi River and other elements affecting the fixing of class rates, it was decided to recommend that the various classes should bear the following relation each to the other:

1st	2nd	3rd	4th	5th	A	B	C	D	E	Classes.
100	83 $\frac{1}{3}$	66 $\frac{2}{3}$	50	40	45	36	30	25	20	Per cent.

Affiant repeats that this decision was reached only after full discussion by the representatives of the several lines and that
5868 such recommendation was adopted by the chief traffic officers of the several railroad companies only after careful consid-

eration and the affiant says that the relation of the class rates resulting from the application of this principle is fair and reasonable and just as applied to the traffic within the State of Arkansas.

Affiant says that in determining the class rates which should be embodied in its recommendation representatives of the several railroads gave careful consideration to the interstate rates applying to, from and through the State of Arkansas and in other localities and also to the class rates in effect in other states. It was found that the class rates applicable from Memphis, Tennessee, to Little Rock, Arkansas, distance of about 135 miles, were:

1st	2nd	3rd	4th	5th	A	B	C	D	E
70	60	45	36	27	29	22	18	15	12

The rates established by the carriers to apply within the State of Arkansas for similar distance are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
70	58	47	35	28	32	25	21	18	14

The rates from Memphis to Fort Smith, distance of about 302 miles, were found to be:

1st	2nd	3rd	4th	5th	A	B	C	D	E
102	87	67	49	40	42	35	30	28	23

The rates established by the various Arkansas railroads to apply on state traffic for similar distance, 310 miles and over 300 miles are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
101	84	67	51	40	45	35	30	25	20

The rates from St. Louis, Missouri, to Little Rock, Arkansas, a distance of 345 miles, were found to be:

1st	2nd	3rd	4th	5th	A	B	C	D	E
100	85	65	49	37	39	32	27	23	18

Tariffs established by the various Arkansas railroads to apply on Arkansas state traffic are, for similar distance, 350 miles and over 345 miles:

1st	2nd	3rd	4th	5th	A	B	C	D	E
105	88	70	53	42	47	37	32	26	21

and that these examples illustrate the fact that the class rates recommended by the said representatives of the several lines approximate the rates which are applicable between interstate points and points within the State of Arkansas. There are very few instances in which the rates for the same distances interstate to, from and through Arkansas are materially lower than the rates now charged by the rail-

roads within the State of Arkansas, and there are numerous cases where such interstate rates are higher than the rates within the State of Arkansas. For instances: Memphis to Eldorado, Arkansas, distance 264 miles, the rates are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
110	93	78	59	43	46	38	30	26	22

The rates for the same distance within the State of Arkansas are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
96	80	64	48	38	43	34	29	24	19

5869-5956 Memphis, Tennessee, to Texarkana, Arkansas, distance 291 miles, the rates are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
117	105	96	79	60	62	50	42	36	29

Rates for same distance within the State of Arkansas are:

1st	2nd	3rd	4th	5th	A	B	C	D	E
100	83	67	50	40	45	35	30	25	20

Affiant states that the representatives of the several lines give careful consideration to the large number of special commodity rates shown in Standard Freight Distance Tariff No. 3 applicable on shipments of various commodities in less than carload quantities and the decision was reached that the tariff should not include special commodity rates on less than carload shipments of any articles, it being found on investigation and study that in other states similarly situated commodity rates were not usually applied on less than carload shipments but the classification ratings were used and the same thing is true with respect to the rates on interstate traffic, except that, during the period when the Standard Freight Distance Tariff No. 3 was in effect and which provides for special low rates on certain commodities in less than carload quantities, the carriers were obliged, in order to avoid discrimination against interstate shipments, to provide in interstate tariffs for commodity rates bearing a proper relation to the commodity rates established by the Railroad Commission of Arkansas applicable from the borders of the state to points within the state. The representatives of the several railroads therefore concluded that the application of any principle of classification different from the Western Classification between points in Arkansas would result in discriminations and was indefensible. This principle of applying class rates in preference to commodity rates on all shipments excepting heavy and bulky articles in carload lots is the practice in vogue in other surrounding states also on interstate shipments and is supported by many rulings of the Interstate Commerce Commission and by numerous text writers on the subject.

* * * * *

5957 The following opinion of Court was delivered and filed in the cause:

In the United States Circuit Court for the Western Division of the Eastern District of Arkansas.

No. 1637.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY and ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY, Complainant,

vs.

ROBERT P. ALLEN, et als.

Moore, Smith and Moore for Complainant-

Joseph M. Hill and James H. Harrod for Defendants.

Opinion of Court.

5958 Published in 187 Fed. page 290.

Opinion

May 3, 1911.

Hon. JACOB TRIEBER, Judge.

The St. Louis, Iron Mountain & Southern Railway Co., which will be referred to herein as the Iron Mountain Railway, and the St. Louis Southwestern Railway Co., referred to as the Southwestern Railway Co., instituted these proceedings against the Board of Railroad Commissioners of the State of Arkansas to enjoin the enforcement of the freight and passenger tariffs promulgated by that board in pursuance of the powers delegated to it by the laws of the State of Arkansas. The grounds upon which the relief is sought are that the rates which apply solely to intrastate traffic are non-compensatory and confiscatory when applied to the entire intrastate business of each of the companies. A preliminary injunction was granted in 1908 by Mr. Justice Van Devanter, then one of the Circuit Judges of this circuit. His opinion is reported in 163 Fed. 141. In 1909 the temporary injunction was modified by this Court, 168 Fed. 720. The pleadings were perfected and a large volume of testimony taken by the parties. At the urgent request of counsel for all parties the services of a master to make findings of facts and state his conclusions of law were dispensed with, notwithstanding what was said in Chicago, Minneapolis & St. Paul Ry. v. Tompkins, 176 U. S. 167, and the cause heard by the Court upon the pleadings and proofs.

It is thought best that at the threshold of these cases the most important principles of law applicable to cases of this nature should be stated; these are rules of law which have been so frequently determined by the highest court of the land that they may now be properly regarded as elementary, and for this reason it will be sufficient

to merely state them without unduly lengthening this opinion with a long list of citations to sustain them.

(a) A State has the power to establish rates to be charged by common carriers for the exclusive intra-state carriage of freight and passengers, and this may be done by direct action of the law-making department or a commission to whom that department of the government has by law delegated it.

(b) The rates thus established must be reasonable and fair to the carriers as well as the public. The State may not make rates so as to confiscate the carrier's property; nor can the carrier make rates which are oppressive to those who by necessity are compelled to employ its services. Whether they are so or not is a question for judicial investigation and determination.

(c) Presumptively, rates thus established by authority are reasonable and just, and the burden of proof to show the contrary is upon the party attacking them.

(d) To justify courts to set aside rates thus established it is incumbent upon the carriers to prove by evidence which is clear, unequivocal and convincing and leaves the Court reasonably free from doubt that they are unjust, that they amount to a taking of property without just compensation and that to make them compensatory the rates would not have to be so high as to make them oppressive to the public.

(e) The rights of carriers and the public are reciprocal. The carrier is entitled to ask a fair return upon the value of its property which it employs for the public convenience, and the public is entitled to demand that no more be exacted from it for the use of the public highway than the services rendered are reasonably worth, and not be oppressive.

Before passing upon the evidence and the law arising therefrom there are some other important rules of law raised by counsel for both parties which should be determined at this time, for some of them, if sustained, would relieve the Court of the necessity of examining the voluminous evidence in these cases, and others will, to a great extent, control the final conclusions to be drawn from the evidence.

Interference with Interstate Commerce.

It is claimed that as the rates prescribed for intrastate business, freight as well as passenger, necessarily affect interstate rates, such acts of the States, whether by direct legislation or through a commission clothed with such power, although limited by the provisions of the statute to intrastate business exclusively, are a burden upon interstate commerce and therefore violative of the commerce clause of the National Constitution.

That intrastate tariffs bear certain relations to, and to some extent control interstate rates cannot be doubted. The evidence in this case establishes that fact conclusively, and even in the absence of such evidence the Court would be justified to take judicial notice of it. No better illustration is needed than the facts and conclusions of law in *Gulf C. & S. F. Ry. Co. v. Texas*,

204 U. S. 403, 413. And this seems to be the rule adopted by the Interstate Commerce Commission since the decision in the *Gulf R. R. case*. *Ambrey Semple v. Galveston, Etc., Ry. Co.*, 17 I. C. C. 267, and Rule 56-B of Administrative Rules. Although the Texas case was one involving freight only, the same principle applies to passenger rates. In fact, it is more apparent in the latter than in the former. Even in the absence of a rule to that effect by the Interstate Commerce Commission or of decisions of the courts. If the States of Arkansas, Texas and Missouri each enact a two-cent rate fare it would be folly for a carrier to attempt to charge a higher rate for interstate or trans-state passengers in those States, for passengers would purchase tickets to the State line of each State at the reduced local rates and thus defeat the higher interstate rates, although the State rates are by the statutes of these State limited to intrastate transportation solely. As stated by Mr. Justice Brewer in his opinion in *Gulf C. & S. F. Ry. Co. v. Texas*:

"In this respect there is no difference between an interstate passenger and interstate transportation. If Hardin, for instance, had purchased at Hudson an interstate ticket for Texarkana, intending all the while after he reached Texarkana to go on to Goldthwaite, he would not be entitled on his arrival at Texarkana to a new ticket from Texarkana to Goldthwaite at the proportionate fraction of the rate prescribed by the Interstate Commerce Commission for carriage from Hudson to Goldthwaite. The one contract of the railroad company having been finished he must make a new contract for his carriage to Goldthwaite, and that would be subject to the laws of the State within which that carriage was to be made."

Nor does the intention of the shipper or passenger to avoid the higher interstate rates by the purchase of tickets or shipments at the lower interstate rates change the rule of law. On that point Mr. Justice Brewer in the *Gulf* case answered negatively the question thus propounded:

"If the only contract of shipment was for local transportation would the State law in respect to the mode of transportation be set one side by the Federal law in respect to interstate transportation on the ground that the shipper intended after the one contract of shipment had been completed, to forward the goods to some place outside the State?"

But does the fact that these intrastate rates bear such relation to interstate rates necessarily make the statutes of a State regulating charges for intrastate transportation by carriers engaged in interstate as well as intrastate commerce void? No authorities directly sustaining this claim have been cited to the Court, although the cases in which statutes of this nature have been attacked are numerous. The only cases cited are those holding in general terms that State statutes which amount to some regulation of foreign or interstate commerce, or which directly or by their necessary operation, burden interstate commerce are invalid as violative of the commerce clause of the National Constitution. On the other hand Mr. Justice Brewer in *Ames v. Union Pacific Ry. Co.*, 64 Fed. 165, 172, affirmed sub nominee *Smyth v. Ames*, 169 U. S. 466, expressly held:

"Neither can I understand how the reduction of local rates, as a matter of law, interferes with interstate rates. It is true the companies may, for their own convenience to secure business, or for any other reason, rearrange their interstate rates and make them conform to the local rates prescribed by the statute, but surely there is no legal compulsion. The statute of the State does not work a change in interstate rates any more than an act of Congress prescribing interstate rates will legally work a change in local rates. Railroad companies cannot plead their own convenience or the effects of competition between themselves and other companies in restraint of the otherwise undeniable power of the State."

Louisville & Nashville Ry. Co. v. Eubank, 184 U. S. 27, cited for complainants, is not in point, as all that was decided in that case was that a State cannot compel carriers to adjust their intrastate rates with reference to their interstate rates.

But it is urged that in the Ames case the evidence failed to show the effect of the State rates on interstate rates, while in the cases at bar that fact is fully established. In Peik v. Chicago, etc., Ry. Co., 94 U. S. 164, 177, Mr. Chief Justice Waite speaking for the Court on a contention of this nature said:

"As to the effect of the statute as a regulation of interstate commerce. The law is confined to State commerce or such interstate commerce as directly affects the people of Wisconsin. Until Congress acts in reference to the relations of this company to interstate commerce, it is certainly within the power of Wisconsin to regulate its fares, etc., so far as they are of domestic concern.

5964 With the people of Wisconsin this company has domestic relations. Incidentally these may reach beyond the State. But certainly until Congress undertakes to legislate for those who are without the State, Wisconsin may provide for those within, even though it may indirectly affect those without."

While that part of the opinion which holds that a State may regulate such "interstate business as affects the people of Wisconsin" has been severely criticised if not overruled by later decisions, that part applying to the intrastate traffic has never been questioned and has been repeatedly followed. But, treating the question as one never before authoritatively determined, the conclusion of the Court, upon well-settled principles of elementary law, is that this contention of complainants cannot be sustained. The right of every sovereign State to regulate public service corporations and the rates to be charged by them, subject to the provisions of the fourteenth amendment prohibiting deprivation of one's property without due process of law and other provisions of the National Constitution, rests upon the police powers, which "are nothing more or less than the powers of government inherent in every sovereignty." License Cases, 5 How. 583; Reagan v. Farmers Loan & Trust Co., 154 U. S. 362, 393; Smythe v. Ames, 169 U. S. 466, 521.

While, generally speaking, the police power of a State is said to extend to the protection of "the public health, the public morals, and the public safety," the law does not recognize those as the extent

of the power, but, as stated by Mr. Justice Harlan in Chicago
5965 B. & Q. Ry. Co. v. Drainage Commissioners, 200 U. S. 561,
592:

"We hold that the police power of a State embraces regulations designed to promote the public convenience and the general prosperity, as well as the regulations designed to promote the public health, the public morals or the public safety."

In *Lake Shore, Etc., Ry. Co. v. Ohio*, 173 U. S. 285, the same learned Justice after reviewing the previous decisions of that Court, states the conclusions of the Court in the following language:

"Now it is evident that these cases (referring to the cases cited in the opinion) had no reference to the health, morals, or safety of the people of the State, but only to the public convenience. They recognized the fundamental principle that, outside of the field directly occupied by the general government under the powers granted to it by the Constitution, all questions arising within a State that relate to its internal order or that involve the public convenience or the general good, are primarily for the determination of the State, and that its legislative enactments relating to these subjects, and which are not inconsistent with the State Constitution are to be respected and enforced in the courts of the Union if they do not by their operation directly entrench upon the authority of the United States or violate some right protected by the National Constitution. The power here referred to is, to use the words of Chief Justice Shaw, the power 'to make, ordain and establish all manner of wholesome and reasonable laws, statutes and ordinances, either with penalties or without, not repugnant to the

Constitution, as they shall judge to be for the good and welfare of the commonwealth and of the subjects of the same.'

5966 *Commonwealth v. Alger*, 7 Cush. 53, 85. * * * It may be that such legislation is not within the 'police power' of a State as those words have been sometimes, although inaccurately, used, but in our opinion, the power, whether called police, governmental or legislative, exists in each State, by appropriate enactments not forbidden by its own Constitution or by the Constitution of the United States, to regulate the relative rights and duties of all persons and corporations within its jurisdiction, and therefore to provide for the public convenience and the public good. This power in the States is entirely distinct from any power granted to the general government, although when exercised it may sometimes reach subjects over which national legislation can be constitutionally extended."

In *Noble State Bank v. Haskell*, decided January 3, 1911, and not yet reported, involving a banking law providing for a guaranty fund to secure depositors, Mr. Justice Holmes in speaking of the police power said:

"It may be said in a general way that the police power extends to all the great public needs. It may be put forth in aid of what is sanctioned by usage or held by the prevailing morality or strong and preponderate opinion to be greatly and immediately necessary to the public welfare."

Among other cases in which the same rule is recognized the following may be appropriately referred to. *Canfield v. United States*,

167 U. S. 518, 525; *Chicago, Etc., R. R. Co. v. Nebraska*, 170 U. S. 57, 73; *Lake Shore, Etc., Ry. Co. v. Smith*, 173 U. S. 684, 689; *Bacon v. Walker*, 204 U. S. 311, 318; *Western Union Tel. Co. v. Milling Co.*, 218 U. S. 406.

5967 Professor Stimson of Harvard University in his able work on "Popular Law-making" says on that subject on page 164:

"Some writers endeavor to justify, under our Constitution, the regulation of rates by the principle of eminent domain; but this source seems far-fetched and unnecessary. It is, of course, done under the police power, but the precedent for that use of the police power is to be found in the history of English law and statutes. Thus we have noted in the Statute of Westminster I. A. D. 1275, that excessive toll contrary to the common custom of the realm was forbidden in market towns. The very phraseology of this statute indicates the antiquity of the doctrine that tolls must be reasonable; but toll was always a technical term, not for ordinary prices of commodities, but for a use or service which was in some way dependent upon law or ordinance."

The same views are expressed in 3 Thompson on Corporations, Sec. 2950, et seq., and Freund on Police Power, Sec. 377.

It has been held by eminent authority that the police power is founded upon that maxim of public policy, *salus populi suprema lex*.

Chief Justice Shaw in *Commonwealth v. Alger*, 7 Cush. 53, 85, after holding that certain powers are not exercised under the right of eminent domain, but the police power, says:

"The power we allude to is the police power, the power vested in the Legislature by the Constitution, to make, ordain and establish all manner of wholesome and reasonable laws, statutes and ordinances, either with penalties or without, not repugnant to the Constitution, as they shall judge to be for the good and welfare of the commonwealth, and of the subjects of the same."

The leading case on the subject of the State's power to regulate rates of corporations engaged in the management of public utilities is *Munn v. Illinois*, 94 U. S. 113, 125. Mr. Chief Justice Waite in his opinion in that case, after carefully reviewing the English as well as American authorities on that subject and referring to the police power as authority for such legislation, epitomizes his conclusions as follows:

"But we need not go further. Enough has already been said to show that when private property is devoted to public use it is subject to public regulation."

In *Sands v. Manistee River Imp. Co.* 123 U. S. 295 (8 S. Ct. 113, 30 L. Ed. 149), Mr. Justice Field, delivering the unanimous opinion of the Court, said on that subject:

"The internal commerce of a State—that is, the commerce which is wholly confined within its limits—is as much under its control as foreign or interstate commerce is under the control of the general government."

Mr. Justice Bradley, who concurred in the judgment in the *Munn* case, in his dissenting opinion in the *Sinking Fund Cases*, 99 U. S. 700, 747, explains the issue involved therein by saying:

"The inquiry there was as to the extent of the police power in cases where the public interest is affected."

If then the power to regulate carriers' rates rests upon the 5969 police power which, under the decisions cited is in fact co-extensive with the governmental power of the State, it requires no extended argument to prove that a regulation or statute of a state enacted under that power is not void because it incidentally affects the commerce clause or any other provision of the National Constitution, especially if it is not in conflict with any act of Congress on that subject or when Congress has not seen proper to act upon that subject. In the *Legal Tender Cases*, 12 Wall. 457, 551, it was claimed that a statute making depreciated currency a legal tender for the payment of debts previously contracted was in conflict with the spirit of the fifth amendment to the Constitution, but the Court in overruling that contention said:

"That provision has always been understood as referring only to a direct appropriation and not to consequential injuries resulting from the exercise of lawful power. It has never been supposed to have any bearing upon or to inhibit laws that indirectly work harm and loss to individuals. A new tariff, an embargo, a draft or a war may inevitably bring upon individuals great loss, may, indeed, render property almost valueless and may destroy the worth of contracts, but whoever supposed that because of this a tariff could not be changed or a non-intercourse act or an embargo be enacted or a war be declared?"

In *Sherlock v. Alling*, 93 U. S. 99, 103, it was held:

"In conferring upon Congress the regulation of commerce, it was never intended to cut the States off from legislating on all subjects relating to the health, life and safety of their citizens, though the legislation might indirectly affect the commerce of the country.

5970 Legislation, in a great variety of ways, may affect commerce and persons engaged in it without constituting a regulation of it, within the meaning of the Constitution. * * * And it may be said generally, that the legislation of a State, not directed against commerce or any of its regulations, but relating to the rights, duties and liabilities of citizens and only indirectly and remotely affecting the operations of commerce, is of obligatory force upon citizens within its territorial jurisdiction, whether on land or water, or engaged in commerce, foreign or interstate, or any other pursuit."

In *Hennington v. Georgia*, 163 U. S., 299, 317, a statute of the State of Georgia prohibiting the running of freight trains on Sundays was attacked as an interference with interstate freight trains but it was upheld as a proper exercise of the police power of the State, although incidentally affecting interstate commerce. The Court, after reviewing the authorities on the subject, held:

"These authorities make it clear that the legislative enactments of the State passed under the admitted police powers, and having a real relation to the domestic peace, order, health and safety of their people, but which, by their necessary operation, affect to some extent, or for a limited time, the conduct of commerce among the

States, are yet not invalid by force alone of the grant of power to Congress to regulate such commerce, and if not obnoxious to some other constitutional provision, or destructive to some right secured by the fundamental law, are to be respected in the courts of the Union until they are superseded and displaced by some act of Congress passed in execution of the power granted to it by the Constitution."

5971 Other cases in which the same principle of law is recognized are *Railroad Co. v. Fuller*, 17 Wall. 560; *Escanada Company v. Chicago*, 107 U. S. 678, 687; *Stone v. Mississippi*, 111 U. S. 746, 751; *Beer Company v. Massachusetts*, 97 U. S. 25, 32; *Railroad Commission Cases*, 116 U. S. 307, 325; *Mugler v. Kansas*, 123 U. S. 623, 667; *Plumley v. Massachusetts*, 155 U. S. 461, 472; *Kidd v. Pearson*, 128 U. S. 1, 20; *Greer v. Connecticut*, 161 U. S. 519, 534; *Smith v. Alabama*, 124 U. S. 465, 480; *N. Y. N. H. & H. R. R. Co. v. New York*, 165 U. S. 628, 631; *Potapso Guano Co. v. North Carolina Board*, 171 U. S. 345, 350; *Erb v. Morash*, 177 U. S. 584; *Gladson v. Minnesota*, 166 U. S. 427, 430; *Pennsylvania Railway Co. v. Hughes*, 191 U. S. 477, 488; *Crossman v. Lurman*, 192 U. S. 189, 196; *Austin v. Tennessee*, 197 U. S. 343, 349; *Pabst Brewing Co. v. Crenshaw*, 198 U. S. 17, 26; *McLean v. Denver & Rio Grande R. R. Co.*, 203 U. S. 38, 50; *Hudson Water Co. v. McCarter*, 209 U. S. 349, 357; *Chicago, R. I. & Pacific Ry. Co. v. Arkansas*, — U. S. — decided February 20, 1911, and not yet reported; *Duluth Brewing & Malt Co. v. City of Superior*, 123 Fed. 357, 59 C. C. A. 481, 485; *Logan & Bryan v. Postal Telegraph Co. (C. C.)*, 157 Fed. 570.

In *Covington, Etc., Bridge Co. v. Kentucky*, 154 U. S. 204, 209, 210 (14 S. Ct. 1087, 38 L. Ed. 962), it was held that the class of commerce in which the power of the State is exclusive is that

"which concerns the strictly internal commerce of the State, and while the regulations of the State may affect interstate commerce indirectly, their bearing on it is so remote that it cannot be termed in any just sense an interference. * * * Congress has no power to interfere with police regulations relating exclusively to the internal trade of the States."

5972 Another matter not to be overlooked is if the State is without the power to regulate purely intrastate transportation because it affects interstate traffic indirectly, where is it vested? Congress is clearly without power to do so, and of course it cannot delegate to a commission a power it does not itself possess. In *Gibbons v. Ogden*, 9 Wheat. 195, the leading case on that subject, the rule of law, which has never been questioned since but always followed, was settled that the power committed to Congress by the Constitution does not extend to commerce wholly within the State. In the language of Chief Justice Marshall, "The enumeration presupposes something not enumerated, and that something, if we regard the language or the subject of the sentence, must be the exclusively internal commerce of a State.

"There can be but one rate, fixed by one authority, whether that

authority be the State or Congress." *Hanley v. Kansas City Southern Ry. Co.*, 187 U. S. 617, 620. If complainants' contention is correct, transportation companies, so far as the exclusively internal commerce of a State is concerned, are beyond all control, either from the State or National Government, for as determined in *Gibbons v. Ogden*, *supra*, the Constitution excluded that class of commerce from the powers vested in Congress by the commerce clause, and as all State rates indirectly affect interstate rates they are, if complainants' contention is right, also void.

The result of such a construction would be that the States do not possess one of the most important powers inherent in every government. The adoption of such a construction by the courts would be justifiable only if any other would do violence to a plain provision of the National Constitution or principles of law so firmly established by previous decisions of the highest court as the land that there is no longer room for construction. In the language of Mr. Justice Peckham in *Addyston Pipe & Steel Co. v. United States*, 175 U. S. 211, 231:

"If neither Congress nor the State Legislatures have such power then we are brought to the somewhat extraordinary position that there is no authority, State or National, which can legislate upon that subject or prohibit such contracts. This cannot be the case."

Since preparing this part of the opinion that of Judge Sanborn, the senior Circuit Judge of this circuit, in *Shepard v. Northern Pacific Ry. Co.*, 184 Fed. 765, has been received and carefully considered. The great learning of that eminent jurist entitles every opinion of his to the very highest consideration, and if not conclusive on this Court is certainly very persuasive. A careful examination of the facts found in that case by the Master and the Court shows that they differ very materially from those established by the evidence in these cases. How necessary it is to determine questions of that nature upon the particular facts of each case is thus pointed out by that learned Judge in his opinion:

"The reduction of local rates does not interfere with interstate rates 'as a matter of law,' yet it may do so as a matter of fact. Whether or not the general and sweeping reductions in local rates in Minnesota necessarily interfere with interstate rates and interstate commerce is in this case, as it must be in every case, a question of fact. The facts which determine that question in this case have been set forth in this opinion at great length, because it is upon them, and not upon legal inferences, that the answer to the question, whether or not the effect of the necessary operation of the acts and orders challenged is substantially to burden interstate commerce, now rests. Those facts are that it was not for 'their own convenience,' but at great inconvenience and loss, not on account of the 'effect of competition between themselves and other companies,' but because these acts and orders, the prohibition of discrimination between localities by the interstate commerce act and the laws of trade, forced them to do so, that the defendants reduced their interstate commerce rates to a parity with the local rates and submitted to the loss of interstate revenue this action entailed."

The schedule of rates adopted by the Minnesota State Commission as stated in that opinion, was such "that each rate for each class for any distance bore such an exact relation to each other rate that given one rate out of the schedule any other rate could be ascertained by mathematical calculation and without reference to the schedule itself."

It was also shown that a number of cities in that State were situated side by side with cities of the adjoining States of Wisconsin and North Dakota. These cities being the same distance they had always been accorded like rates, in and out, by the railroads, and a failure by the companies to maintain like rates for these cities would seriously impair the power to transact their interstate business with these cities in the neighboring States; and the natural effect of these lower Minnesota State rates would give to the cities of that State on its border line an undue and unjust preference, an advantage, in fact, over the neighboring cities in adjoining States.

5975 The same conditions applied to the passenger traffic.

From these facts the conclusions reached by the Master and approved by the Court were that the natural and inevitable effect of these reductions was to compel the railroad companies to give an undue and unreasonable preference to localities in the State of Minnesota over those in adjoining States in violation of the interstate commerce act of Congress. The Court said:

"The effect of the necessary operation of these acts and orders was substantially to burden and directly to regulate the interstate commerce of the companies by causing the transformation of that part of their transportation upon which their former interstate rates were higher than the sums of the locals over the border towns in Minnesota into local commerce at those sums, or by causing the companies to reduce their interstate fares and rates affected by the reduced local fares and rates to a parity therewith. This effect was unavoidable because the interstate commerce law prohibited the companies from giving to Minnesota towns and cities the undue and unreasonable advantage and from subjecting the cities and towns of other States in the vicinity to the undue and unreasonable disadvantages which a maintenance of their former interstate fares and rates and prescribed local fares and rates would have wrought, and because passengers and freight will move at the lowest available rates."

No such facts were proven in these cases, and for this reason the Court is of the opinion that the conclusions reached in the *Shepard* case are not applicable to these cases.

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Rates in Other States.

It is claimed by the attorneys for the State that as there is no evidence that the rates sought to be enjoined are lower than those in other States, it must be presumed that they are reasonable. But that is not the law. On the contrary, assuming that the evidence introduced establishes the fact that the rates now attacked are no lower than those charged in other States, that, of itself, would not be

sufficient to sustain this claim, especially in the absence of proof that all the conditions are the same. As stated by Mr. Justice Brewer, then Circuit Judge, in *Chicago & N. W. Ry. vs. Dey*, 35 Fed. 886, 881:

"The fact that it is higher or lower (the schedule of rates) than other schedules in force elsewhere or at other times in this State, does not necessarily determine its validity."

In *Ames v. Union Pacific Ry. Co.*, 64 Fed. 165, 188, that same proposition was advanced and denied by the Court. Mr. Justice Brewer in his opinion disposed of the contention by saying:

"It is, however, urged by the defendants, that in the general tariffs of these companies there is an inequality; that the rates in Nebraska are higher than those in adjoining States; and that the reduction by house rule 33 simply establishes an inequality between Nebraska and the other States through which the carriers run. The question is asked, are not the people of Nebraska entitled to as cheap rates as the people of Iowa? Of course, relatively, they are. That is, the carriers must not discriminate against the people of any one State.

But not necessarily absolutely as cheap, for the kind and 5977 amount of business and the cost thereof are factors which determine largely the question of rates, and these vary in the several States. The volume of business in one State may be greater per mile, while the cost of construction and maintenance is less. Hence, to enforce the same rates in both States might result in one in great injustice, while in the other it would only be reasonable and fair. Comparisons, therefore, between the rates of two States are of little value, unless all the elements that enter into the problem are present. It may be true, as testified by some of the witnesses, that the existing local rates in Nebraska are forty per cent higher than similar rates in the State of Iowa, but it is also true that mileage earnings in Iowa are greater than in Nebraska. In Iowa there are two hundred and thirty people to each mile of railroad, while in Nebraska there are only one hundred and ninety, and as a general rule the more people there are the more business there is. Hence, a mere difference between the rates in two States is of comparatively little significance."

Upon appeal, this excerpt was quoted in full and approved by the Supreme Court, that Court saying:

"In these views we concur, and it is unnecessary to add anything to what was said by the Circuit Court on that point." 169 U. S. 540.

Existing Conditions.

It is next claimed that in determining whether rates are reasonable or unreasonable, the controlling factors are "the kind of business, the amount of business, and the commercial conditions", Counsel then proceed to elaborate "in other words, a railroad that has a virtual monopoly of the business of more than a million 5978 people, with all the business it can do all the time in hauling the coal and lumber, farm products and merchandise, is not

entitled to the rate that a carrier would deserve that serves a sparsely settled community with only an occasional haul". While this is true in some respects, it is equally true that such a carrier is entitled to rates sufficiently high to enable it to earn sufficient net profits to pay a reasonable interest on its investment, if it can be done without making the rates so high as to be oppressive. While a road "serving a sparsely settled community with only an occasional haul" would not be justified in charging rates sufficiently high to earn the same return, or in some extreme cases any return, on its investment, if such rates have to be so high as to be oppressive, that is no reason for making the rates of a carrier that has more business so low as to make them non-compensatory, for if that were the law, how would it benefit the carrier that its road is doing all the business it can handle? This question has been fully settled by numerous decisions of the courts, and without quoting from them, the following will be found sustaining the rules of law as stated in paragraphs "b" and "e" of this opinion. *Reagan v. Farmers Loan & Trust Co.*, 154 U. S. 362; *San Diego, etc., Co. v. Jasper*, 189 U. S. 439, 466; *Wilcox v. Consolidated Gas Company*, 212 U. S. 19, 48; *In re Arkansas Railroad Rates*, 168 Fed. (C. C.) 720, 733.

Limit of Time in Proofs.

It is further claimed that the evidence on the part of complainants is confined to six months from July 1st to December 31st, 1907. It is true that the main evidence of the Iron Mountain Railway is 5979 confined to that period, and in the absence of other evidence or some satisfactory explanation for its omission, should not be considered as sufficient to set aside the acts of a sovereign state. But there is also evidence of the business for other periods. The earnings and expenditures of the Iron Mountain Railway for the six months ending June 30, 1907, appear in Exhibit "8" to Mr. Johnson's testimony and show the earnings for that period to be smaller than the later period, although the two cents per mile passenger rate did not go into effect until April, 1907. The business of the Southwestern Railway Company earnings and operating expenses for the entire fiscal year ending June 30th, 1908, is shown by Exhibit "11" to Mr. Kimbell's testimony. It is also shown by undisputed evidence that the year 1907 was one of the most prosperous years for both railways; that the effects of the financial panic were not felt by them at all until the latter part of November, 1907, and then only slightly, while they were more seriously felt during the year 1908. Exhibit "45" of Mr. Johnson, which is a statement of the gross earnings of the Iron Mountain for each six months' period from January 1st, 1900, to June 30, 1908, shows that the gross earnings for the period ending December 31st, 1907, were the largest of any period and the gross earnings per mile above the average of the eight years preceding it. The six months' period ending December 31st, 1907, is, therefore, the least favorable to the complainants, and for this reason no cause for complaint on the part of the State.

In addition to these facts counsel for the State in reply to a question from the Court, admitted that the officials of these railways not only produced all documents, books, waybills and other papers which would throw light on the subject, and furnished all information in their possession whenever requested by counsel for the State, but also permitted the attorneys and expert accountants for the State free access to all the books, accounts and other papers in their possession, having such as were at division points sent to headquarters when requested to enable them to prepare the defense or verifying the exhibits presented by complainants. In view of these facts there is no substantial ground for the claim that the period selected by complainants was unfair to the State or insufficient to enable the Court to determine the issues in these cases, or that the earnings and expenditures for these periods do not show a fair average of the business of complainants, at least fair to the defense. The fact that the able counsel for the State and expert accountants did not call for data of other periods than those produced by complainants and in evidence, is, if not conclusive at least persuasive that they considered the evidence offered sufficient for a just determination of the issues involved.

Personal Injuries.

It is also claimed that complainants are not entitled to "charge in the expense of operation the sums they paid for injuries to persons." This claim cannot be treated seriously. It is true, as claimed by counsel, "that the people of Arkansas are not insurers of the risks of the railroad business," but on the other hand, such accidents cannot be wholly avoided, and as there is no pretense that they were willful or intentional on the part of the officials of the companies they must be considered as unavoidable risks of operation of the business. Many persons and corporations engaged in industrial pursuits of a character dangerous to employes or others, insure themselves against such loss, and the premiums paid therefor are charged to expense of operation. Railroads, or rather these roads, for reasons which are not explained by the evidence in these cases, but probably economic, carry their own insurance against such losses and charge them as expense of operation as they would otherwise charge the premiums paid for the insurance if they obtained it from insurance companies. As these indemnity insurance companies make the charge high enough to cover the expense of the management of their business and a profit on their investment, the policy of the railroad companies is probably most economical.

Premature Filing of Suit.

It is next claimed that before applying for relief to this Court complainants should have applied to the commission, and only upon its refusal to grant it would an appeal to the courts lie. *Prentiss v.*

Atlantic Coast Line, 211 U. S. 210, is relied on as sustaining this contention, but neither the facts nor the conclusions of the Court in that case are applicable to these now under consideration. In fact, so far as that case is applicable it is a strong authority against this claim. There the rates were made by a commission clothed with judicial functions, its acts subject to review by appeal to the Supreme Court of the State. Pending such appeal a writ of supersedeas may be obtained which would suspend operation of the action appealed from until the final disposition of the appeal. Yet the Court held that no matter what the statute called the acts of the commission, they were legislative and not judicial, but as the remedy by
5982 appeal had not been exhausted when the suits were instituted, the Circuit Court should have required them to exhaust their remedy by appeal before granting the injunction. The decision was placed upon the ground of comity, the Court saying:

"It seems to us only a just recognition of the solicitude with which their rights have been guarded that they should make sure that the State in its final legislative action would not respect what they think their rights to be before resorting to the Courts of the United States. * * * As our decision does not go upon a denial of power to entertain the bills at the present stage, but upon our view as to what is the most proper and orderly course in cases of this sort when practicable, it seems to us that the bills should be retained for the present to await the results of the appeals if the companies see fit to take them."

The opinion in that case is fully explained in *Willcox v. Consolidated Gas Co.*, supra, and by Judge Hook in *A. T. & S. F. Ry. Co. v. Love*, 174 Fed. (C. C.) 59, and *M. K. & T. Ry. Co. v. Love*, 177 Fed. (C. C.) 493, affirmed March 28, 1911. — Fed. —, — C. C. A. —; the last cited cases arose under the Constitution and laws of Oklahoma, which were similar to those of Virginia, where the Prentiss case arose.

In addition it may be proper to refer in this connection to the fact that Mr. Hampton, for a number of years, and at the time of the institution of these suits, a member of the Arkansas State Railroad Commission, and for two years its chairman, testified that "all the reductions of rates made by the commission were after public hearings to which the railroads were invited, and which they attended, and most always against their protest and objections."

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Acquiescence.

It is next claimed that the freight tariffs now attacked had been in force without any material change for five years before this bill was filed and the claim made that they were confiscatory; that this long delay was such an acquiescence as to prevent a court of equity from granting an injunction at this late day to restrain their further enforcement. While such long acquiescence undoubtedly raises a very strong presumption that the rates are reasonable, if the conditions are the same, it would not be conclusive, as changed conditions might overthrow this presumption entirely. The law is well settled

that rates made by a commission on one or more commodities so low as to be non-compensatory for the transportation of those particular commodities, do not justify any interference by the courts unless it is further shown that these rates would reduce the net earnings of the carrier on its entire business to an extent that they would cease to be compensatory. *Minneapolis & St. Louis Ry. Co. v. Minnesota*, 186 U. S. 257, 268; *Atlantic Coast Line R. R. Co. v. North Carolina Corporation Commission*, 206 U. S. 1, 24; *Northern Pacific Ry. Co. v. North Dakota*, 216 U. S. 579; *Railway Company v. Gill*, 54 Ark. 112, 115, affirmed in 156 U. S. 649, 665; *Railway Company v. Smith*, 60 Ark. 221, 244.

It is, therefore, incumbent upon the carrier complaining to show that the earnings of its entire business, after deducting the legitimate expenses, are non-compensatory within the meaning of the law before it is entitled to such relief as is sought in these cases.

The freight rates established eight years ago may have been high enough under conditions then prevailing to be compensatory. 5984 The increase of wages of employes and of material necessary for the operation of the road having been gradual, as shown by the evidence, although, as claimed, decreasing the net profits, may have left it doubtful whether they had ceased to be compensatory within the meaning of the law.

Additional burdens, and consequent expenditures, imposed on railroads between 1903 and 1907 by legislation, State and national, for the purpose of protecting the lives of passengers and employes, or protecting them from injury or adding to the comfort of the public, may have reduced the net earnings still lower and yet not so low as to make them confiscatory, but when in 1907 the passenger rates were reduced by the Legislature of Arkansas from three to two cents per mile, a reduction of 33 1/3% on the gross earnings from the entire passenger traffic, this, added to the former reductions and increased expenditures, may have resulted, after a fair trial, in convincing complainants that the net profits from all the earnings in the State had reached almost the vanishing point. It was then that they were, for the first time, in position to invoke the aid of the courts with any reasonable prospect of success.

Another important factor to be considered in connection with this claim is that the evidence (Exhibit 30) establishes conclusively that in the ten years preceding the institution of these actions there has been a steady and very considerable increase in the cost of everything necessary for the maintenance and operation of the road, taxes and the cost of labor. It is true that by improvement of methods better results are obtained, and the cost thereby considerably reduced.

But, on the whole, it is claimed that the cost of operation has 5985 increased much more than the saving. The comparison of net earnings of the roads for the years 1897 and 1907, as shown by Exhibit "Z" of defendants, is not fair, as the report of the Interstate Commerce Commission, from which these figures were obtained, also shows that there was a great depression of railroad traffic at that time, and only in June, 1897, i. e., the last month of the

twelve covered by that report, did the earnings of the railroads show a healthy revival of commercial conditions.

The commission in that report say (page 9):

"A review of the statistics of operation since 1890 would disclose the fact that each year ending June 30, from 1890 to 1893, inclusive, closed with an increase in net and gross earnings as compared with the previous year. The year 1893-4, however, proved to be a disastrous one for railways, the gross earnings being less \$147,000,000, and the net earnings \$50,000,000 than the corresponding items of the previous year. The year 1894-5 showed practically no recovery from the depression of the previous year. The year 1895-6 closed with an increase in gross earnings of \$74,000,000 and net earnings of \$27,000,000. But this movement toward better conditions did not continue during the year covered by the present report, which as compared with 1896 shows again a decrease in gross earnings of \$28,000,000, and in net earnings of \$7,000,000. It was not until June, 1897, that is to say, the last month of the twelve covered by this report, that the railway earnings showed a healthy revival of commercial conditions. This fact indicates the character of the year covered by the present report, and must be held in mind by one who endeavors to interpret the figures about to be presented."

On the other hand the evidence shows that the year 1907 5986 with which the comparison was made, was one of the best in the history of railroads. As claimed by the testimony of Mr. McPherson, the increased efficiency of operation had been overcome, and far outrun by the forces working against it; that the increased rate of wages; the increased cost of material; the burdens imposed by legislation, and the increase of taxes, had "far outrun" the benefits that had accrued from those improvements.

"And even acquiescence in past continuing injury does not estop their victim from enjoying their future continuance." *Layton Pure Food Co. v. Church & Dwight Co.*, 182 Fed. 35, 41, — C. C. A. —; *Love v. A. T. & S. F. Ry. Co.*, — Fed. —, — C. C. A. —, and authorities cited there.

As stated by Judge Sanborn in the last cited case:

"Courts of equity have plenary power, and it is often their duty to issue mandatory injunctions to restore and then maintain a condition of things that has been wrongfully disturbed or changed.

Under such conditions it cannot be said that they had acquiesced for such a period of time as to preclude a court of equity from granting them relief if otherwise entitled thereto, especially in view of the testimony of Commissioner Hampton that "the reductions in rates were made most always against their protest and objections." Whether they have succeeded in establishing such a state of facts by the evidence in the cases at bar can only be determined from a careful, analytical examination of the proofs and the application of the rules of law governing such cases.

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It is next claimed that to entitle plaintiffs to an injunction it must be shown that they will suffer a "continued loss," and in support of that it is contended that the lower freight rates and the reduced passenger rates will increase the volume of traffic to such an extent as to make up the decrease of those reductions. This claim is wholly speculative. In the language of Mr. Justice Brewer in *Chicago N. W. Ry. Co. v. Dey*, *supra*, in reply to a similar contention:

"But speculations as to the future are not guides for judicial action; courts determine rights upon existing facts. Of course, there is always a possibility of the future; good crops may increase transportation business; poor crops reduce; high or low rates may likewise affect; but the only fair judicial test is to apply the rates to the business that has been done in the past and see whether upon that basis such rates will be remunerative or compel the transaction of business at a loss." 35 Fed. 881.

A year's trial after the two cents passenger rate had been put into effect, it is claimed by complainants, and that is the gist of their complaint, has demonstrated that the rates then in force were confiscatory and reduced the earnings of the entire business to a point which makes them non-compensatory. If this is found to be true from the proofs they are clearly entitled to relief. To avoid any injustice by changed conditions in the future, as prophesied by counsel for the State, the Court has the power to retain control of the cases with leave reserved to defendants to move the Court at any time for a reinvestigation of the question of the reasonableness of

5988 these rates, as was done by Mr. Justice Brewer in *Ames v. Union Pacific Railway Co.*, *supra*. Nor would a permanent injunction in these cases prevent the commission from making new rates sufficiently low to protect the public from oppression and yet not so low as to make them confiscatory of the investment of the roads.

Are the Rates Confiscatory?

The matter of most importance to be determined is whether the rates, freight and passenger, in force at the time of the institution of these actions by order of the State Railroad Commission and the Legislature of the State, were so unreasonably low as to justify the Court to enjoin their enforcement upon the ground that they are non-compensatory to an extent which makes them practically confiscatory of complainants' property. To determine that question it is necessary for the Court to ascertain and make findings what the investment of each road is; what its gross earnings from the intrastate traffic, freight and passenger, are; what the expenditures necessary for the proper management of the roads are; how to apportion the investment and expenditures between the intra and interstate business; what the net earnings from all the intrastate traffic are, and what would be a reasonable return on the investment.

Investment.

By the acts of complainants the Court is relieved of a very difficult problem, that of the valuation of the property. In the bills of complaint the railroads only ask for compensatory rates on the basis of valuation according to the assessment of their property for 5989 taxation by the State of Arkansas made by the State Board of Railroad Assessors. Its reasonableness is, of course, conceded by the defendants, and, therefore, there is no necessity for the Court to determine what rules should govern in ascertaining what the investments on which complainants are entitled to a reasonable compensation are. It is proper to state here that it is agreed by the Parties that the assessments for taxation in the State of Arkansas are on a basis of fifty per cent of the real value of the property and that these assessments were made on that basis. For this reason the assessments must be doubled to ascertain the real value of the property. The values of the two roads thus assessed in this State when doubled, are:

Iron Mountain.....	\$39,986,564
Southwestern.....	14,029,634

The Gross Earnings.

The next question to be determined is what are the gross earnings from the entire business in the State of Arkansas, the expenditures therefor, and the cost of the intrastate business as distinguished from the interstate. The facts relating to this item are undisputed and show the earnings of the Iron Mountain for the six months ending December 31, 1907, to be:

Freight Revenue.

	Amount.	Percentage of total revenue in state.
Intrastate	\$640,248.17	9.59%
Interstate	4,133,210.33	61.92%
Miscellaneous	122,814.41	1.84%
Total	\$4,896,272.91	73.35%

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Passenger Revenue.

Intrastate	\$836,542.20	12.53%
Interstate	568,476.21	8.52%
Miscellaneous	373,785.47	5.60%
Total	\$1,778,803.88	26.65%

Grand total from Freight and passengers in the State of Ar- kansas.....	\$6,675,076.79	100.00%
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The earnings for the Southwestern Railway Company for the same period are:

Freight Revenue.

	Amount.	Percentage of all earnings in state.
Intrastate	\$173,064.45	7.56%
Interstate.....	1,597,230.02	69.80%
Miscellaneous	25,061.02	1.01%
Total	<u>\$1,795,355.49</u>	<u>78.37%</u>

Passenger Revenue.

Intrastate	\$246,101.33	10.76%
Interstate	170,735.14	7.46%
Miscellaneous	75,981.44	3.41%
Total	<u>\$492,817.91</u>	<u>21.63%</u>
Grand total.....	<u>\$2,288,173.40</u>	<u>100.00%</u>

Miscellaneous Earnings and Expenses.

In computing the net earnings the accountants for complainants have entirely eliminated the earnings from, as well as the expenditure for, what is termed "miscellaneous sources," neither crediting the intrastate earnings with any portion of this item nor charging them with any part of its expenses. The explanation given for this omission is that it is impossible to suggest any method whereby this item, which arises from state and intrastate traffic, can be separated or divided between them, either as to earnings or expenses.

5991 That it cannot be ascertained with mathematical accuracy is no doubt true, but neither can the apportionment of expenditures between the state and interstate or passenger and freight business be accurately ascertained. The exhibits filed by both companies specify the items which make up these miscellaneous items, and judging from them the Court is of the opinion that to divide them on the basis of the earnings from each source will be as approximately right as is possible without injustice to either of the parties. The Court can conceive of no good reason why these earnings from miscellaneous sources should not be credited to the state business in the proportion they bear thereto, and the expenses apportioned in the same manner, and that is the best conclusion which can be reached from the evidence in these cases.

The intrastate business of the express companies is not so insignificant as to justify a finding that there is neither profit nor loss from it for the railroads, and this applies also to the earnings from carriage of the mails. The local rates for express packages are considerably higher than those for the through carriage owing to the short haul, and the railroads receive the compensation on the basis

of gross earnings of the express company. From the evidence in this record the Court is of the opinion that the earnings from express traffic are, if anything, more profitable than from the passenger traffic, while mail probably yields a smaller net profit, but upon the whole all of the items classed as "miscellaneous earnings" will yield as much revenue as other sources of transportation. The Court therefore holds that the miscellaneous earnings should be credited to the other earnings, and as there is no evidence in the record which will enable the Court to divide them with mathematical exactness between the state and interstate earnings, they will be apportioned on the revenue basis, which will be as near correct as any other basis which can be adopted from the evidence in this record.

Omitted Earnings.

The next items to be considered for the purpose of determining the earnings of the complainants are those which counsel for the State claim are omitted from the statements filed by the Iron Mountain Railroad Company but are properly chargeable to it.

The evidence establishes the fact that as a part of the consideration for the exclusive privilege granted to the Pacific Express Company, The Missouri Pacific Railway Company, which is the owner of the entire capital stock of the Iron Mountain Railway Company, and therefore in absolute control thereof, received \$2,400,000 of the express company's capital stock, or forty per cent of the entire capital stock. This was paid to them without any other consideration so far as the evidence shows.

There is a further provision in the contract that this capital stock shall not be increased above six million dollars without the consent of the railway company, which would indicate that if there is an increase of the capital stock of the express company the railway company will be entitled to forty per cent of this increase without paying any other consideration therefor than the privileges granted by the contract. It recites, "The said second party (the express company) in consideration of this contract and the rights and privileges accorded by it, agrees to give to the said party of the first part \$2,400,000 of its capital stock (and it is agreed that the capital stock of the second party shall not be increased above six million dollars, without the consent of the first party)."

The evidence also establishes the fact that the Missouri Pacific Railway Company receives now, and for years has received from the express company, an annual dividend of six per cent on this stock, amounting to \$144,000 annually. Whether any larger earnings have been placed in the surplus and the value of the stock thus increased does not appear from the evidence. Although the express company, under this contract, enjoys the exclusive privilege over the Iron Mountain road, no part of this annual dividend, which is a part of the consideration, is credited to that road. As the contract expressly provides for the privilege of the railroad company to have the exclusive right on all trains from St. Louis to Texarkana, which

is the exclusive territory of the Iron Mountain Railway, controlled by the Missouri Pacific Railway, and also covers all lines "owned, operated and controlled by the Missouri Pacific Railway", which includes all other branches of the Iron Mountain Railway, the latter is clearly entitled in a court of equity to its pro rata share of this annual dividend, for in equity The Missouri Pacific Railway holds that stock as trustee for itself and its subsidiary lines. There is no evidence in this record that any other lines are interested in this contract except The Missouri Pacific and the Iron Mountain Railways, nor is there any evidence other than the mileage owned and operated by these two roads which could serve as a basis for division. The Court, therefore, adopts the mileage of the two roads as the proper basis. The mileage of the Missouri Pacific Railway and lines operated by it is 3,491.68 miles and that of the Iron Mountain 5994 2,599.15 miles, a total of 6,090.83 miles. Of the Iron Mountain mileage 1,355.09 miles are in the State of Arkansas. Upon this mileage basis the Iron Mountain is entitled to receive of this dividend \$31,968 for the State of Arkansas for the year, and for six months to one-half of that sum, amounting to \$15,984, to be divided between the state and interstate business as other passenger revenues derived from miscellaneous sources are apportioned.

It is next claimed that the hotel, dining room, saloon, lunch stand and checking privileges in the Union Passenger Station at Little Rock, although of an annual rental value, as shown by the evidence, of \$4,200.00 has been granted to the occupants for the nominal rental of one dollar per annum. While there can be no doubt that the company has a right in so far as it alone is concerned to give away any of its property, in a controversy of this nature, involving the claim that the revenues derived from its business in the State under the tariffs fixed by the State, are so small as to make them confiscatory, it cannot be permitted to do so and should be charged with the reasonable value of its property which, by its permission, is used by others not for the benefit of the railroad but for their individual profit. If by charging the value of these privileges, or any other matters which the law permits the carrier to charge for, the earnings on the rates fixed by the State are shown to be compensatory, it has no right to complain and insist upon higher rates to enable it to act generously toward favorites. Generosity cannot be practiced at the expense of justice, nor should it be permitted to be dispensed at the cost of others. No evidence has been offered by the company to explain why these valuable privileges are given 5995 away; no consideration of any kind is shown to have passed to the company therefor. The evidence shows that the expense of repairs and preserving the premises in proper condition is also borne by the railroad company. The finding must therefore be that this generosity ought not to be charged to the people of the State, but the loss must be borne by the railway company. Neither the statutes nor orders of the commission require it to give this or any of its other property away. It had a right and it was its duty, so far as its claim in this cause is affected thereby, to charge and collect the fair value thereof. *Knoxville v. Water Co.*, 212 U. S. 1, 12.

The reasonable rental value of these premises is found by the Court from the evidence to be \$4,200.00 per annum, and for six months amounts to \$2,100.00, which should be added to the miscellaneous earnings from passenger traffic in the State, to be properly apportioned between state and interstate earnings on the same basis as other miscellaneous passenger earnings are divided.

It is also claimed by the State that the Bunch Elevator was the property of the Iron Mountain Company and its rental value \$20,000 a year, but was rented to the Bunch Company for the nominal sum of one dollar per annum. There is no evidence to warrant a finding that the elevator was the sole property of the railroad company at that time. The only testimony on that point is that the records of the railway company show that one dollar per annum is received for the rental, but whether that is for the use of the right-of-way of the railway company on which the elevator stands or for the elevator itself is nowhere shown.

In another proceeding had in the bankruptcy court for 5996 this district it appeared that the Bunch Company was the real owner of that elevator and the railroad company, since the institution of this suit, purchased it from the trustee in bankruptcy of the Bunch Company, with the approval of the Court, paying therefor the sum of \$93,665 to the trustee in bankruptcy of the Bunch Company. Although this fact was not put in evidence in this case, still as there is no evidence which the Court feels would warrant it to make a finding that the railroad company was the owner of the elevator and that its rental value is as claimed, the Court finds that this claim of the State cannot be sustained.

Another claim made by the State is that among the expenses charged to the business of this State there is an item for repairs of all the tools and machinery in the shops of the railway company at Argenta, Arkansas, although the repair work there is not limited to the cars of the Iron Mountain but includes cars of the entire Missouri Pacific system. The amount charged to the State of Arkansas on this account is \$48,671.67, or 77% of the entire amount paid out at that shop for the repairs of these tools. It is claimed that this large sum is expended at the Argenta shops because they are the largest of the entire system. The other shops are in Missouri and Kansas, but they are much smaller. There are also some other small repair shops on other parts of the system. There is nothing in the evidence to indicate what would be a proper sum to be charged, but it is claimed that as this State is charged on equipment with only 55% of the cost of repairs, the charge on this item should be no higher. The evidence shows that the cars requiring repairs are usually sent to the nearest shop, and as many of the cars of the Missouri Pacific equipment, when needed, were used on the Iron Mountain Railway, these cars when in need of repairs were

5997 sent to the Argenta shops. There is no claim that the cost of the repairs of the cars is not properly divided between the two systems, but the cost of the repairs of the tools, it is claimed is not. It is shown by the testimony introduced on the part of the railway company that 90% of the cost of the repairs of these tools is caused by repairs of locomotives, and these all belong to the Iron Mountain

Railway Company and none to The Missouri Pacific Railway. There would, therefore, be only ten per cent of this amount which would be improperly charged. The difference would only be 22% of this ten per cent, and when divided into the six months' period would leave the amount so insignificant, less than \$150.00, that the net earnings can hardly be said to be affected by it.

Objections are also made by the State to the item, among the expenses, of a fine imposed on the Iron Mountain Railway by a court of this State for a violation of the law prohibiting the giving of free passes to members of the Legislature. The evidence fails to show whether this was done with the knowledge or approval of the higher officials of the company or by the inferior officials for whose acts the company is, under the statute, responsible. As there is no presumption of an unlawful intent, in the absence of proof, the Court is not inclined to sustain this claim without determining whether it could under any circumstances be sustained.

Objections are also made to the expenses of the Memphis and Ft. Smith terminals charged entirely to the Arkansas business, although all of the Memphis business being in the State of Tennessee is interstate, and a very considerable part of the Ft. Smith traffic is 5998 of that nature and all the earnings are credited to interstate business. The uncontradicted evidence shows that the Memphis terminal, which is the terminal point of that branch of the Iron Mountain, is used exclusively for the Arkansas business and differs in no respect from what would be incurred if it were in this State on the west side of the Mississippi River instead of being in Memphis on the east side of that river. This also applies to the Ft. Smith terminals in so far as the Arkansas business is concerned, the Oklahoma business being charged to that State with its proportion of expense. These matters will be considered and allowance made therefor when considering the apportionment of expenses between the state and interstate business, and thus the injustice to the intrastate business rectified.

Another claim is that the State of Arkansas is charged with part of the salaries paid to Messrs. Phelps and Seibert, shown by the accounts of the Iron Mountain to have been connected with the legal department at the headquarters in the City of St. Louis, Mo., and of Mr. Cox, who was, during the year 1907, residing at Little Rock. It is claimed on the part of the State that the services of these parties were for lobbying and therefore not a proper charge. But there is no evidence to sustain the claim that the salaries were paid for such services. The failure of the railway company to show what the services were for which they were compensated does not justify the Court in finding upon a mere suspicion that they were for services which are unlawful and against public policy. The burdens to prove an unlawful act is upon the party charging it, and will not be presumed in the absence of evidence to that effect.

The rentals paid by the Iron Mountain Railway for the 5999 use of the Van Buren Bridge of the St. Louis & San Francisco Railway Company, and for the use of the tracks of the Southwestern Railway from Paragould, Arkansas, to the Missouri State line, both being used solely for interstate traffic, it is claimed

by the State that no part of that expense should be charged to the intrastate business. The Court finds from the evidence that while the intrastate business makes no use of these facilities and therefore obtains no direct benefit from them, the indirect benefits, by relieving the tracks of the company of the interstate trains using these leased facilities would make it inequitable not to charge it with its proportion. The amounts involved are comparatively small, still that fact alone would not prevent the Court from making allowance therefore if, in its opinion, it would be equitable to do so.

It is also claimed that the intrastate business should not be charged with any of the expense of commercial agents and solicitors employed by the railway companies in different sections of the country, because, the contention is, they only solicit interstate business. But the evidence on the part of the railway companies shows that indirectly the intrastate business receives its full share of the business obtained through these agents. If a theatrical company intending to come to Arkansas is induced to come over that road into the State they will then continue to use that road for its intrastate trips to other cities in the State. Also new industries and homeseekers induced by the efforts of these men to locate in this State adds materially to their intrastate business. For these reasons the Court is of the opinion that the State business is properly chargeable 6000 with its proportion of that expense.

Some other matters of this nature involving small amounts have been presented by the learned counsel for the State. They were each and every one carefully considered and are disallowed. To state them and the reasons for the conclusions reached would make this opinion too lengthy and the amounts involved are too small to justify it.

The items which the Court finds should be charged to the companies and added to the miscellaneous earnings of the passenger service of the Iron Mountain Railway for the six months period are: For dividend from Pacific Express Company \$15,984; rents from passenger station at Little Rock \$2,100, a total of \$18,084.00, making a total of miscellaneous earnings from passenger revenue \$391,869.47. By adding these sums to the other passenger revenue it naturally changes the percentages to some extent. As changed they will be as follows:

Iron Mountain Railway.

Passenger Revenue.

	Amount.	Percentage of passenger revenue.
State	\$ 836,542.20	46.55
Interstate	563,476.21	31.64
Miscellaneous	391,869.47	21.81
Total passenger earnings	\$1,796,887.88	100.00

Dividing the miscellaneous earnings between state and interstate upon that basis the result is:

	Passenger Revenue.	Per cent.	Miscellaneous.	Total.
State \$	836,542.20	59.54%	\$233,318.80	\$1,069,861.00
Interstate	568,476.21	40.46%	158,550.67	727,026.88
Total . . .	\$1,405,018.41	100.00%	\$391,869.47	1,796,887.88

6001 Dividing the miscellaneous of the freight earnings between the state and interstate we have the following results:

	Freight Revenue.	Per cent.	Miscellaneous.	Total.
State \$	640,248.17	13.41%	\$ 16,469.41	\$ 656,717.58
Interstate	4,133,210.33	86.59%	106,345.00	4,239,555.33
Total . . .	\$4,773,458.50	100.00%	\$122,814.41	\$4,896,272.91

This makes the total earnings of the Iron Mountain Railway in the State of Arkansas for the six months ending December 31, 1907, \$6,693,160.79.

Making the same division of the miscellaneous for the Southwestern Railway for the six months ending December 31, 1907, the result is:

Passenger Service.

	Revenue.	Per cent.	Miscellaneous.	Total.
State \$	246,101.33.	59.04%	\$ 44,859.44	\$ 290,960.77
Interstate	170,735.14	40.96%	31,122.00	201,857.14
Total . . .	\$ 416,836.47	100.00%	\$ 2,450.97	\$ 175,515.42

Freight Revenue.

	Revenue.	Per cent.	Miscellaneous.	Total.
State \$	173,064.45	9.78%	\$ 2,450.97	\$ 175,515.42
Interstate	1,597,230.02	90.22%	22,610.05	1,619,840.07
Total . . .	\$1,770,294.47	100.00%	\$ 25,061.02	\$1,795,355.49

Total earnings of Southwestern in the State of Arkansas for the six months' period ending December 31, 1907, \$2,288,173.40.

Apportionment of Valuation of Property.

What bases should be adopted for the purpose of apportioning the valuation of the property to each of the two classes of earnings, the state and interstate, in order to enable the Court to determine

whether the earnings of the railroads from its intrastate business under the rates established by the State Railroad Commission are compensatory?

As the issues in these cases involve the entire intrastate business in the State of Arkansas, freight as well as passenger, it is immaterial how the valuation of the property is apportioned between the freight and passenger service. After ascertaining the proportionate net earnings from all sources of the intrastate business, it can be ascertained what they yield on the entire investment, as apportioned between the state and interstate business, and the main issue involve, whether the rates are compensatory or confiscatory, satisfactorily determined.

On the part of complainants it is claimed that the revenue basis pure and simple should be adopted for that purpose, because it is claimed that values of railroad property, like all other property depend to a great extent upon its producing capacity and net earnings. On the other hand it is claimed that the division should be made on the basis of the ton mileage, because that is the use to which the property is put, and it is urged that the higher the rates for intrastate traffic are the greater will be the proportion of the valuation charged to that part of the earnings. Or, in the language of the learned counsel, "when they use the revenue to divide the property instead of using the ton miles, and the ton mileage as the expression of the use of the property, they have assigned 90 per cent more, that is the relation that seven bears to thirteen per cent, to the state business upon which they expect to earn a return. * * *

When they have divided the property on a revenue basis it takes almost double the use of the property; they have assigned 90 per cent more property to State use than it actually uses in addition to assigning 100 per cent on account of the double amount of State business revenue per ton per mile over interstate."

In estimating the value of property its net income, if not the most important, is certainly a very important factor. A building in New York City is valued much higher than a building exactly like it and the erection of which cost the same price, situated in Little Rock. The reason therefor is that the income from its rentals is much higher in the former city than in the latter. So a building in Little Rock, or any other city, on its main business street, is of much greater value than if standing in the suburbs, although both buildings may be exactly alike, put to the same uses and cost the same. That the same rule should and does apply to railroads is shown by the market value of the stocks. While the share of a railroad whose earnings enable it to pay a six per cent dividend annually will command a premium on its face value, those of a railroad earning no dividends and whose income is barely sufficient to earn the fixed charges are practically worthless, or will sell for a very low price, and that only on speculative grounds.

Take two roads, one in a level country with practically no grades, inexpensive to maintain, and constructed by reason of these facts, at a low cost, while another road built in a mountainous, rocky country where it was necessary to do a great deal of expensive blasting

of rock, building tunnels, with heavy grades and many curves. The latter road cost probably three or four times as much to build as the former, yet, owing to the level grades, absence of sharp curves and more productive lands along its line, the earnings of the former are much greater than of the latter. Not only that, but owing to the grades, the one road can carry only half as many cars as the other; the consumption of fuel; added to these the greater outlay for wages to employes, cause expenses to be so great as to leave small net earnings for that road whose cost was greatest, while the net earnings of the other are sufficient to pay large dividends. Can there be any doubt that the value of the first will be much greater than the latter, and that its shares will sell for a much higher price? The value of every investment or property is measured, to a large extent at least, by the value of its use, not by its use divorced from its value. The value of a railroad for taxation it has been uniformly held by the courts, may properly be determined by the value of its bonds and stocks. Without citing the numerous cases decided by the courts, both state and national, approving this method of assessing railroad, telegraph and other property of this nature, the following may be referred to:

State Railroad Tax Cases, 92 U. S. 575; Kentucky Railroad Tax Cases, 115 U. S. 321; Western Union Telegraph Co. vs. Massachusetts, 125 U. S. 530; Pullman Co. vs. Pennsylvania, 141 U. S. 18; Columbus, Southern Railway Co., vs. Wright, 151 U. S. 470; Pittsburgh, Etc., R. R. Co., vs. Barkus, 154 U. S. 421; Adams Express Co. vs. Ohio, 166 U. S. 186, where the Court said:

"Whatever property is worth for the purpose of income and sale it is worth for the purpose of taxation."

And this is the rule sanctioned by the Supreme Court of Arkansas. Wells Fargo Express Co. vs. Crawford County, 63 Ark. 576.

This is evidently the rule recognized and acted on by the railroad assessing board of the State of Arkansas as shown by the evidence in this case. The main line of the Iron Mountain Railroad is practically a water level road; no mountains to cross, no rocks to blast or tunnels to excavate, and the leading commercial cities and industries of the State along its line. On the other hand the White River Branch of that road was the most expensive road ever constructed in the State. Miles of it had to be cut out of rock and tunnels cut through rocky mountains; there are no large cities along its line, and the country is sparsely settled owing to the heavy grades and the many curves made necessary by the topography of the country it cannot possibly carry as many cars to a train and transport freight as economically as the main line. The State officials, charged by law with the duty of assessing the property, must have taken these facts into consideration when they assessed those railroads. The White River Branch, in spite of its great cost, was in 1907 valued by that board at \$19,000 per mile and assessed on the basis of 50 per cent of its value at \$9,500, while the main line was valued at \$45,000 per mile and assessed at 50 per cent of that sum at \$22,500 per mile.

For these reasons the earning capacity of a railroad is the most

important factor to be taken into consideration in determining its value. As shown above, it has been taken into consideration by the assessing officers of the State and should be taken into consideration for the purpose of determining the apportionment of values in this case. If by reason of the higher rates allowed by the State tariff the net earnings of the property are increased the value of the 6006 property is correspondingly increased and the assessment for taxation made accordingly.

The proportions assignable to the intrastate business in the State based upon the assessments of 1907 for the six months ending December 31, 1907, are:

Iron Mountain	\$5,158,266.75
Southwestern	1,430,321.18

Bases for Apportionment of Expense.

The most important and serious problem to be determined is the basis to be adopted for apportioning the expense between the inter and intrastate business.

Smyth v. Ames, 169 U. S. 466, 541, has conclusively established as a rule of law that "the reasonableness or unreasonableness of rates prescribed by a state for the transportation of persons and property wholly within its limits must be determined without reference to the interstate business. The State cannot justify unreasonably low rates for domestic transportation, considered alone, upon the ground that the carrier is earning large profits on its interstate business, over which, so far as rates are concerned, the State has no control." It is therefore absolutely necessary to determine how these expenses should be apportioned between the two classes of earnings without injustice to either party.

All parties agree that there are no fixed bases which will enable the Court or the most experienced railroad statistician to make that apportionment with mathematical accuracy. All that can be done is to adopt those bases which will come nearest being right. As stated by Mr. Justice Brewer in *Chicago, Etc., Ry. v. Tompkins*, 176 U. S. 167, 178:

6007 "If the Court meant simply that it could not determine that fact (the actual cost of the local earnings) with mathematical accuracy, basing it upon testimony of the exact amount of money paid out for doing such work, it is undoubtedly true, but there are many things that have to be determined by court and jury in respect to which mathematical accuracy is not possible. Take the ordinary cases of condemnation of real estate. * * * Such testimony is not to be disregarded simply because it cannot demonstrate by figures the exact amount or per cent of the extra cost. It is obvious on a little reflection that the cost of moving local freight is greater than that of moving through freight, and equally obvious that it is almost, if not quite impossible to determine the difference with mathematical accuracy."

The first matter to be considered is what theory to adopt. Counsel, as well as accountants, statisticians and railroad men of experience

differ as to which one should be adopted. On the part of complainants it is claimed that the straight revenue basis furnishes an approximately correct result of the net earnings of each class of traffic, and no other will come as near it. On the other hand the contention on the part of the State is that for freight the ton mile basis, and for passenger earnings the passenger-mile basis, will produce the more correct results. The train-mile basis is conceded by all as the least accurate.

This question is not raised for the first time in these cases. It seems to have been considered as an important factor in every rate case and has perplexed other courts as much as it has this. The authorities on the subject are anything but harmonious, although the largest number of decisions, especially of the national courts, 6008 favors the contention of complainants. But a careful consideration of the facts in each case and the various methods employed to reach results shows that neither of them will produce approximately correct results if no other factors are taken into consideration.

The straight revenue theory as advanced by the learned counsel and accountants of the railroads is clearly wrong, as none of them takes into consideration the increased rates charged for the intrastate traffic. No further proof of the fallacy of this theory is required than the examples and calculations of the accountants for the railroads in the exhibits filed with their testimony. Mr. Nay, who, at the time he testified, had thirty-seven years' experience as a railroad accountant, having begun as a clerk of statistics, and was at the time his testimony in these cases was taken the comptroller of the Chicago, Rock Island & Pacific Railway Co., one of the great railroad systems of the country, gave the following illustration for the purpose of establishing the correctness of his theory and to controvert, as he states, "an argument which is sometimes used to the effect that using the revenue basis is like traveling in a circle, and those who take that position claim that when the revenue of intrastate traffic is doubled the operating expenses are also doubled and the end is just the same as in the beginning." He thereupon gives the following illustration to demonstrate the fallacy of that argument, as he states:

"First take for illustration a small railroad with freight operating revenue of \$100,000 and freight operating expenses of \$80,000, of which the intrastate freight traffic is \$25,000 and the interstate freight traffic is \$75,000. We have the following statement:

	Intrastate.	Interstate.	Total.
Operating freight revenue..	\$25,000.00	\$75,000.00	\$100,000.00
Operating freight expenses, divide the expense be- tween the intrastate and interstate on a revenue basis and it would be as follows.	20,000.00	60,000.00	80,000.00
Net operating freight revenue	\$5,000.00	\$15,000.00	\$20,000.00

"Suppose that the rates on intrastate freight traffic are increased so as to exactly double the intrastate freight revenue, leaving the interstate freight revenue just the same, and the operating freight expenses exactly the same, an impossible condition in actual practice, but the extreme condition is used in order to emphasize the error of the argument that doubling the intrastate revenue in such a case would double the interstate expenses. After doubling the intrastate freight revenue just mentioned we would have the following statement:

	Intrastate.	Interstate.	Total.
Operating freight revenue...	\$50,000.00	\$75,000.00	\$125,000.00
Operating freight expenses to intrastate revenue, nearly 40% of the total revenue, the operating expenses of \$80,000 divided on the revenue basis would now be	32,000.00	48,000.00	80,000.00
Net operating freight revenue	\$18,000.00	\$27,000.00	\$45,000.00

From this it will be seen that although the intrastate freight earnings were increased \$25,000 after the intrastate tariff rates had been raised 100 per cent without any increase in expenditures, in the final result it is the beneficiary to the extent of \$13,000 only, while the interstate earnings, with no increase in these rates, increased \$12,000.

Mr. R. E. Kimbell, the auditor of one of the complainant railroads, was requested to make a similar calculation, and the 6010 result was the same as that of Mr. Nay. His calculations are filed as Exhibit 23 to his deposition.

That such a rule cannot be adopted was clearly shown by Mr. Justice Brewer in Chicago, Milwaukee & St. Paul Ry. Co. v. Tompkins, where, speaking of such a contention, he said:

"But that there was some fallacy in this reasoning would seem to be suggested by the fact that although the defendants' schedule would have reduced the actual receipts 15 per cent on the passenger and 17 per cent on the freight business, the earnings capacity for the last year was diminished only one-tenth of 1 per cent. Such a result indicates that there is something wrong in the process by which the conclusion is reached. That there was can be made apparent by further computations, and in them we will take even numbers as more easy of comprehension. Suppose the total value of the property in South Dakota was \$10,000,000, and the total receipts both from interstate and local business were \$1,000,000, one-half from each. Then, according to the method pursued by the trial court, the value of the property used in earning local receipts would be \$5,000,000, and the per cent of receipts to value would be 10 per cent. The interstate receipts being unchanged, let the local receipts by a proposed schedule be reduced to one-fifth of what they had been, so that instead of receiving \$500,000 the company only re-

ceives \$100,000. The total receipts for interstate and local business being then \$600,000, the valuation of \$10,000,000, divided between the two, would give to the property engaged in earning interstate receipts in round numbers \$8,333,000, and to that engaged in earning local receipts \$1,667,000. But if \$1,667,000 worth of property earns \$100,000 it earns 6 per cent. In other words, although 6011 the actual receipts from local business are only one-fifth of what they were, the earning capacity is three-fifths of what it was. And turning to the other side of the problem, it appears that if the value of the property engaged in interstate business is to be taken as \$8,333,000, and it earned \$500,000, its earning capacity was the same as that employed in local business—6 per cent. So that although the rates for interstate business be undisturbed, the process by which the trial court reached its conclusion discloses the same reduction in the earning capacity of the property employed in interstate business as in that employed in local business, in which the rates are reduced." 176 U. S. 176.

On the other hand, if the ton-mile basis is adopted for the division of the operating expenses between inter and intrastate earnings, without considering the additional expenses of the local business, which it is conceded by all exists, although they differ as to the percentages, the result would be just as far wrong as the other. But if proper allowances are made for the higher rate received for local business and also for the increased cost of the local business, as it appears from the evidence, it is wholly immaterial which of these two theories is adopted, whether the revenue or the ton-mile basis, as the results will be the same. As an illustration of the correctness of this statement the following example will serve. Adopt as factors that the entire earnings in the State from freight are \$2,000,000; that \$750,000 of that was realized from 75,000,000 ton miles of intrastate freight, and \$1,250,000 from 250,000,000 ton miles of interstate business, thus showing that from the intrastate business the earnings were 1 cent per ton mile and from the interstate 6012 business 5 mills per ton mile; the articles carried, it is assumed, are practically the same. The cost of the entire business was \$1,500,000, and the cost of the local business is 200 per cent greater than that of the through business. The calculations on these factors on the revenue and ton-mile basis were made by the accountants of the railroads and of the State are as follows:

Calculations made by accountants of the railroads:

Revenue Basis.				
	Amount.	Per cent.		
Intrastate.....	\$750,000	37.50x1½—	56.25—	47.37
Interstate	1,250,000	62.50	62.50	52.63
	\$2,000,000	100.00	118.75	100.00

The total expenditures of \$1,500,000 divided upon these percentages and deducted from the gross earnings will result in the following net earnings:

	Intrastate.	Interstate.	Total.
Gross revenue.....	\$750,000	\$1,250,000	\$2,000,000
Operating Expenses...	710,550	789,450	1,500,000
Net earnings...	\$39,450	\$460,550	\$500,000
Ton miles.....	75,000,000	250,000,000	325,000,000
Cost per ton mile.....	9.474	3.158	4.615

Ton Mile Basis.

	Amount		Per cent.	
Intrastate	75,000,000	23.08x3—	69.24—	47.37
Interstate	250,000,000	76.92	76.92—	52.63
Total	325,000,000	100.00	146.16	100.00

	Intrastate.	Interstate.	Total.
Gross revenue.....	\$750,000	\$1,250,000	\$2,000,000
Operating expenses, per cent.	47.37	52.63	100.00
	\$710,550	\$789,450	\$1,500,000
Net earnings.....	\$39,450	\$460,550	\$500,000

	Intrastate.	Interstate.	Total.
Ton miles.....	75,000,000	250,000,000	325,000,000
Cost per ton mile.....	9.474	3.158	4.615

6013 Calculations made by accountant for the State:

Revenue Basis.

	Intrastate.	Interstate.
Interstate 62.5%—5 mills per ton mile}	\$750,000	\$1,250,000
Intrastate 37.5%—1 cent per ton mile}		

Expenses (State costing 200% more than interstate, or three times as much as interstate, on ton mile basis, thus allowing 200% greater cost on ton mile basis),

Interstate 52.63%—\$.003158 per ton mile;		
Intrastate 47.37%—\$.009474 per ton mile.	710,550	789,450
Net earnings on this basis.....	\$39,450	\$460,550

Ton Mile Basis

Interstate 62.5%—½ cent per ton mile;		
Interstate 37.5%—1 cent per ton mile....	\$750,000	\$1,250,000
Expenses (State costing 3 times as much as interstate per ton mile),		
Interstate 52.63%—\$.003158 per ton mile;		
Intrastate 47.37%—\$.009474 per ton mile.	710,550	789,450
Net earnings on this basis.....	\$39,450	\$460,550

The same result is reached by applying to the ton mile basis the rule laid down by Mr. Justice Van Devanter when the temporary injunctions in these cases were granted by him.

	Tonnage per mile.	
Interstate	250,000,000—	250,000,000
Intrastate	75,000,000x3—	225,000,000
Total		475,000,000 ton miles

Dividing the \$1,500,000 expense by the sum of 475,000,000 shows the cost per ton mile to be \$.003158.

Interstate	250,000,000x\$.003158—	\$789,450
Intrastate	225,000,000x\$.003158—	\$710,550

Deducting these sums from the earnings leaves:

	Earnings.	Expenses.	Net earnings.
Interstate	\$1,250,000	\$789,450	\$460,550
Intrastate	750,000	710,550	39,450
Total	2,000,000	\$1,500,000	\$500,000

6014 From this it clearly appears that a great deal of this voluminous testimony of the accountants for both parties as to what theory should be adopted, and the elaborate argument of counsel on that question need only be made use of for the purpose of ascertaining some of the items which will show the difference of cost between the two classes of traffic. For that purpose the testimony on the difference of cost, as well as difference in rates will have to be carefully considered, and the findings will determine how the apportionment should be made.

While the evidence is of such a nature that whatever conclusions the Court may reach they will not be mathematically accurate, it differs in no respect from other uncertain questions of fact which have to be determined by a court or jury, as stated in the excerpt from the *Tompkins* case hereinbefore copied. But to ascertain the cost of the different items of expense it is impossible to adopt either theory to the exclusion of the others in all matters. For some items the revenue theory will necessarily have to be adopted, while in others the ton mileage, car mileage or train mileage are the only basis which will enable the Court to determine from the evidence in these cases how the different items of expenditures should be apportioned. After ascertaining the difference of the cost of expenditures and the difference in the rates between state and interstate transportation, the final determination of what the net earnings of each road on its intrastate business are can be as correctly ascertained by adopting the revenue as the ton-mile basis.

6015 Inter and Intrastate Tariff Rates.—Freight.

Whether the ton mile, car mile, train mile or revenue basis is adopted to arrive at correct results it is necessary to ascertain the relation of the tariff rates charged for the interstate business and those charged for the intrastate business, for if the latter are sufficiently high to make up the difference in cost found to exist between the two then that difference has been fully provided for, and to make any additional allowance therefor would be doubling the cost and to that extent doing an injustice to the State. Or, in other words, if the evidence shows that while the interstate earnings are compensatory, the intrastate rates are so low as to make them non-compensatory, and if it is shown that the difference in cost of the two classes of traffic is 100 per cent, but that the rates for the intrastate are 100 per cent higher than those charged by the roads for the through traffic, then there would be no cause for interference by courts. That the interstate rates are too low is not claimed in these cases, the intrastate rates being the only ones complained of. In fact, it is shown by the evidence that the net earnings of the entire Iron Mountain system were sufficient to pay for the year 1907 and for several years prior thereto a dividend of 10 per cent on its capital stock, after paying the interest on its bonded indebtedness.

Taking up the freight tariffs first, it is claimed on the part of the State that the rates charged for the State business exceed those for the through business on the Iron Mountain 98 per cent, the earnings for the local business being 13.377 mills per ton mile and for the through business 6.75 mills, and on the South-
6016 western they exceed 141 per cent, the earnings for the local business being 20.945 mills and for the through 8.665 mills for the ton mile. The statistics of the two roads, as shown by the statements filed, sustain these figures, but it must be conceded that unless the commodities hauled in the State and through business are practically the same these figures cannot be adopted as proper factors for the determination of that question. This is easily proven by the following simple example: If the state business carries one-half high-class traffic at 3 cents a ton mile and one-half low class at 1 cent per ton mile, the average of the entire traffic would be 2 cents; but if it carries only 25 per cent high-class commodities at 3 cents and 75 per cent low class at 1 cent, the average would at once be reduced to 1.5 cents per ton mile, a difference of 33 1-3 per cent.

The heaviest tonnage in interstate traffic consists of lumber and grain, which are carried at the lowest rates; grain constitutes 13.75 per cent of the entire tonnage on the Iron Mountain, and something less on the Southwestern. The grain tonnage in local traffic is practically negligible. Other commodities of a low class, such as cement, salt and iron, are transported almost exclusively in interstate traffic, while practically very few, if any, very low class commodities are carried in local traffic to the exclusion of the through. But it is unnecessary to go into details to show that the difference in the earnings of the two traffics is largely affected by the commodities carried and the changes in ton-mile earnings at different times are caused by the shifting of the commodities transported. In the

opinion of the Court this is conclusively shown by the fact that although the rates, inter as well as intrastate, of both roads, the Iron Mountain and Southwestern, as established by the Arkansas 6017 Railroad Commission, and the tariffs published by the roads for interstate business, are identical, the earnings of the Southwestern on local business are 20.945 mills per ton mile, while those of the Iron Mountain are only 13.377 mills, a difference of over 55 per cent, and on interstate business the earnings of the Southwestern are 8.665 mills and those of the Iron Mountain 6.75, a difference of 20 per cent. This difference is, in part at least, explained by the fact that the Iron Mountain carries a great deal of coal in inter as well as intrastate traffic, having branches through the coal fields of the State, 22.83 per cent of the entire state traffic of the Iron Mountain being of that character. This is carried at an average of 6 mills per ton mile against 13.377 mills for the entire business. The Southwestern transports very little coal, practically none local and comparatively little interstate. Other low commodities carried in much larger quantities locally by the Iron Mountain than the Southwestern are stone, brick and lumber, the local lumber carried on the main line of the Iron Mountain and especially when reduced to ton miles being considerably greater than on the Southwestern, owing to the fact that most of the large cities of the State are on that line and the number of saw-mills on the north half of that line in the State being few as compared with those on the Southwestern. The Arkansas standard distance tariff shows that stone, which constitutes 7.20 per cent of the total state traffic on the Iron Mountain, was required to be carried at an average rate of $5\frac{1}{4}$ mills per ton mile; lime, brick and cement, which constitute 6.13 per cent, were carried at the same rate. The length of the haul is another 6018 important matter to be considered, for as the rate per mile gets lower, under the State distance tariff, as the distance increases, the shorter the haul the greater the revenue is per ton mile.

That the shifting of commodities is the principal cause of these differences in earnings per ton mile is further shown by the testimony of Mr. Kimbell. At the request of counsel for the State he prepared a statement (Exhibit G) of the earnings of the Southwestern for the month of January, 1909, after the temporary injunction had been granted, and the higher rates made by that road had been put in effect. This showed an increase of 96.1 per cent of the intrastate earnings for the ton mile; but a statement prepared by him showing the revenue under the then current rates, and what they would have been under the commission rates (Exhibit 58) shows that the actual increase of the rates was only 48.18 per cent, a difference of almost 100 per cent.

It is therefore impossible to adopt these figures as proper factors for the purpose of ascertaining the difference between the two rates. The only method by which this can be ascertained with anything near accuracy is to compare the state rates as established by the State Railroad Commission with the interstate tariffs of the railroads, taking into consideration the different commodities and quantities

carried in local and through traffic. And this comparison is at best only approximately correct. The transstate rates are considerably lower than the Arkansas state rates and they constitute 51.16 per cent of the entire tonnage in Arkansas over the Iron Mountain and considerably more on the Southwestern. For some commodities the

interstate rates, especially between Arkansas and Louisiana
6019 and Missouri and Arkansas, are higher than the local rates.

This is due to the fact that in many instances they are carried under the State tariff at commodity rates while under the interstate tariffs they are transported at class rates. The lowest rates in the interstate, or rather transstate traffic, are those which are controlled by zones and common points, there being 2,600 common points in the State of Texas which carry the same rates regardless of distance. On behalf of the railroads it is claimed these great differences are more apparent than real. The Texas common points are explained very fully and clearly by Mr. Perkins. He says:

"In establishing the rates to this territory from St. Louis and the east we have a peculiar condition in that the Texas territory is entered by the transportation lines from three sides out of a possible four. The M. K. & T., the Santa Fe and the Frisco enter the State from the north; the Iron Mountain, the Cotton Belt, the V. S. & P. and the T. & P. from the east; the Southern Pacific, the Illinois Central and also the steamer lines from the Atlantic Coast enter from the south. Denison, Texas, a point in the extreme northern part of the State, and reached by the M. K. & T. and Frisco, will produce the minimum haul for those two lines from St. Louis or the east, while a similar shipment to the same point of destination handled by the Illinois Central and the Southern Pacific through New Orleans, Houston and then north, would offer the maximum haul for that route. A shipment to Houston, Texas, routed via M. K. & T., the Santa Fe or Frisco, would offer nearly the maximum haul for shipments handled by either of these routes; while if routed via the

Illinois Central or the Southern Pacific would yield the maxi-
6020 mum haul via that route. This is true in nearly all parts of the State and indicates very largely why a blanket zone in the State of Texas is necessary. If the Cotton Belt or the Iron Mountain railroads were the only routes by which to reach the State of Texas the conditions would be entirely different. We could then, and would no doubt, make our rates on a graded scale, making them higher as they proceeded south or southeast through the State."

The transstate lumber business is ten per cent of the entire transstate, equal to over five per cent of the entire tonnage. The roads only solicit that business nearest to them, and in any event it is hardly reasonable to suppose that any considerable business originating in the southern part of Texas would be given to the roads entering the State from the north or vice versa, as the delay in the transportation, which must be considerable, would be sufficient to prevent it. Besides, the connecting lines will naturally transfer their freight to the shortest line in order to obtain for their roads the maximum proportion possible. This also applies to the citrus movement from California, which the testimony shows is not solicited by

these roads, and practically none transported over their lines, in fact none over the Southwestern.

Mr. Watson, the assistant general freight agent of the Southwestern, in testifying to refusals to accept shipments offered to his road where, owing to river competition, the rate was too low to be profitable, gave the following explanation when asked what the principle upon which traffic men act in determining when they will not solicit or take business:

"When the business is unremunerative or will not yield a fair rate for the services we are required to perform after deducting the arbitrary we must pay."

This, he declares, is a universal rule with his road and all others.

The lumber and grain zones are controlled by commercial and competitive conditions and yield but small profits at the rates carried, but on the other hand cars loaded with grain from the north are loaded with lumber on the return trip, thus creating a reciprocal haul, which is an important item in the earnings of every road, and is taken into consideration by all rate makers. Besides the low rates on lumber, enabling the mills of the far south to compete with those farther north and nearer the commercial centers, aid in the development of the country, which would otherwise remain unsettled and thus gives the roads considerable high-class traffic and creates local business which otherwise would not exist. To that extent the local traffic is indirectly benefited. In addition to this, the State tariff also provides for some zones for commercial reasons and competition necessarily compels the consideration of competitive points. In order to enable coal mine operators in the extreme western part of the State to compete with those nearer the center of the State the State Commission has made a blanket rate, applying the Coal Hill rate, which is 114 miles from Little Rock, the railroad and geographical center of the State, to all mines west of it in Logan, Franklin and Sebastian counties, extending to the western State line, a difference of over fifty miles in some instances. It has also made the Spadra rate applicable to all coal mines on the Dardanelle and Russellville road to all points in the State north, south and east of Little

Rock. On sugar there is a blanket rate, including in those rates every road in the State regardless of the number of roads over which it is handled, to all points 150 miles and over. Competitive points in the State take the tariff of the shortest road of necessity, for it is a rule in railroad tariffs which may be called axiomatic that the shortest road establishes the rate for all competitive roads in that territory. While the competitive points in Arkansas are not so many, still, considering the length of the hauls and the volume of business (8 per cent only of the entire traffic on the Iron Mountain and 2.95 per cent on the Southwestern) they are sufficiently numerous to require consideration in determining the difference in rates. A few illustrations will show what they are. The following are some of the points which are competitive and therefore must be served by all roads at the rate fixed by the shortest road. From Little Rock to other points of the state the differences in mileage are here given:

Camden:

Iron Mountain.....	93 miles
Southwestern.....	124.5 miles

Fordyce:

Rock Island.....	82 miles
Southwestern.....	95 miles

Warren:

Rock Island.....	86 miles
Iron Mountain.....	149 miles

Helena:

Iron Mountain.....	160 miles
Rock Island and Arkansas Midland.....	118 miles

Paragould:

Iron Mountain.....	163 miles
Southwestern.....	197 miles

Jonesboro:

Iron Mountain.....	147 miles
Southwestern.....	176 miles

6023 Newport:

Iron Mountain.....	83 miles
Rock Island.....	117 miles

Texarkana:

Iron Mountain.....	145 miles
Southwestern.....	207 miles

Forrest City:

Iron Mountain.....	117 miles
Rock Island.....	88 miles

Brinkley:

Rock Island.....	64 miles
Southwestern.....	101 miles

Crossett:

Iron Mountain.....	114 miles
Rock Island.....	138 miles

Hope:

Iron Mountain.....	112 miles
Southwestern.....	173 miles

Bridge Junction:

Iron Mountain.....	146 miles
Rock Island.....	129 miles
Southwestern.....	185 miles

Texarkana to Ft. Smith:

Iron Mountain.....	208 miles
Kansas City Southern.....	160 miles

Helena to Pine Bluff:

Iron Mountain.....	203 miles
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Southwestern and Arkansas:

Midland.....	100 miles
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As it is conceded by all parties that the longer the haul the less expense per mile the zones naturally increase with the length of the haul. This is fully recognized by the Arkansas Railroad Commission in its distance tariff. With few exceptions, as the distance increases the mileage rates proportionately decrease.

6024 In the class rates the increase in the rates is made every five miles for the first 100 miles. When the distance is over 100 miles the increase of rates is for every 10 and in some instances 20 miles, and over 200 miles for every twenty or thirty miles. The commodities tariff, under which the great bulk of the local business moves, with few exceptions, increases the rates every 25 miles for the first 100 miles, and if over 100 miles for every fifty miles and on a number of commodities the zones are larger. On lumber and other forest products, for the first one hundred miles, the increase in rates is every twenty-five miles, and over one hundred miles every fifty miles. The same difference is made on packing-house products and grain. On salt the same rates apply to two hundred miles as to one hundred miles. For forest products, rough material, when the manufactured product is reshipped over the same line bringing in the rough material, the rates are much lower than the regular tariff; for the first fifty miles it is two cents a hundred, for the next fifty miles two and one-half cents, for the next fifty miles three and one-half cents, from 150 to 250 miles five cents, and over 250 miles eight cents. As nearly all the lumber when manufactured is reshipped this latter rate practically applies to nearly all through material of forest products except that carried to the mills by the tap lines. As construed by the Supreme Court of the State this rate also applies when the reshipment of the manufactured product is made to points outside the State of Arkansas. *Chapman & Dewey Lumber Co. v. Jonesboro L. C. & E. Ry. Co.*, 24 Ark. Law Rep. 535.

6025 Another important matter to be considered in this connection is the fact that the Arkansas distance tariff in fixing the minimum weight of carloads is on an average 40 per cent lower than for interstate transportation. The only commodity for which the minimum is fixed at 40,000 pounds is fire brick, and the only commodities at 30,000 pounds a car are common brick, sawdust, iron, staves and stone. Coal at 25,000 pounds, eighteen commodities, including lumber and forest products, at 24,000 pounds, and the rest at 20,000 pounds and less. On the other hand the average capacity of the Iron Mountain cars is 67,000 pounds, and the minimum fixed by the western classification on through business

averages 40 per cent more than that of the State. Most of the coal cars used in interstate traffic carry 100,000 pounds.

The difference between the minimum of carloads as established by the State Commission and the western classification was ascertained by the Court by comparing the two item by item, and the difference of 40 per cent in favor of the interstate is a very conservative estimate.

Taking all these matters into consideration, and after careful calculations, which it is unnecessary if not impossible to set out in this opinion, the finding of the Court is that, altogether, the intrastate freight rates in force at the time of the institution of these actions and in 1907 were 50 per cent higher than the interstate.

Passengers.

While the rates for passengers apparently are the same for intra and interstate, the evidence shows that the actual charge for, or rather revenue from, the state business is greater, due, no doubt, to the much longer haul and competitive conditions. For the 6026 period in controversy the actual fares collected for each passenger mile on the Iron Mountain was: Intrastate, 1.929 cents; interstate, 1.865 cents, a difference of 3.48 per cent, for which allowance will be made.

Expenses Between State and Interstate.

That there is a material difference between the expense of state and interstate business is conceded by all. On the part of the State it is claimed this difference is not exceeding 87 per cent, while on the part of the railroads the contention is that it is much greater. This 87 per cent is the result of the calculations after deducting the share with which the interstate traffic is chargeable for its proportion of the freight carried on local trains. The actual difference between the expense of local and through trains per ton mile, as calculated by the State's accountants, and testified by Mr. Hamilton, is 162.67 per cent. But, it is claimed, as a large proportion of the freight transported on local trains is interstate, that part of it should be charged with its proportionate share of this additional cost, and when that is done the actual difference in cost, it is claimed, is 87 per cent. The lowest estimate made by any witness for complainants seems to be that it is at least 200 per cent greater, while some estimate it as much as 700 per cent. The witnesses for the railroads do not base their opinions upon itemized statements, as no records were kept by either of the roads for the purpose of dividing the expenses between the state and interstate business, but as all these witnesses are men who have been engaged in railroad work and connected with railroads from their earliest manhood, starting at the bottom of the 6027 ladder and now occupying most responsible positions, some as general managers, comptrollers, auditors, superintendents and other high positions, it is claimed that their testimony, based upon their great experience, should be controlling. These witnesses for the railroads all agree on the one point, that to divide these expenses

on any other than the revenue theory would not give accurate results; that their practical experience enables them to determine from a given state of facts the difference of cost between state and through business on percentages as nearly correct as it is possible to arrive at, unless separate accounts of the expenditures had been kept, not only for the inter and intrastate business, but also the transstate.

On the other hand the accountants for the State offered in evidence schedules which they claim are based on facts as they appeared from the records of the railroads when such were obtainable, and on the experience of men long in the railroad service when factors had to be adopted arbitrarily. The scheme for obtaining these facts is new, never having been used by any accountants in any of the numerous rate suits which have heretofore been before the courts. It was devised by Mr. Wharton, a member of the firm of Haskins & Sells, expert accountants of national reputation. Mr. Wharton himself testifies frankly that he has had no practical experience in the management of any work on railroads; that his knowledge of railroad accounting is limited to what he acquired from his connection as one of the accountants for the State of Missouri in the railroad rate litigation of that State and the testimony of the expert railroad men who testified in those cases; that he also con-

6028 edge thus acquired he has evolved the scheme now presented to the Court on behalf of the State. Who the railroad men whom he consulted are, or what their experience at that time was, what positions they had ever occupied with railroads, he fails to state, except that Mr. Hamilton, who is one of the accountants employed by his firm, and under whose supervision most of the work offered in evidence was conducted, had for a number of years been in the employ of railroads. Mr. Hamilton, who was present at the protracted hearing of this case and explained to the Court many of the items in the statements filed as exhibits for the State, impressed the Court as a man of ability, a fine accountant and a fair witness.

In this connection it is but proper for the Court to say that all the witnesses in these cases impressed the Court as having testified as intelligently and as fairly as is possible. It is true they differ widely in their views, but it is an acknowledged psychological fact that the opinions entertained for years by a man cannot be discarded at once, and that all persons are to a certain extent influenced in their views by their environments, as well as the duties they are called upon to discharge for others.

But the experience of Mr. Hamilton in connection with the management of a railroad, when compared with that of the witnesses introduced for the complainants, is very limited. At the age of fifteen he began as a messenger boy for a railroad and continued in different positions until 1906, when at the age of thirty-two he entered the employ of Haskins & Sells as accountant and has been in their employ ever since. Their and his employment has always been as accountants for the State and in opposition to the claims of the carriers; his employment by railroads was always in a
6029 subordinate position, his highest position being that of chief clerk to a chief of a division; his duties were practically all of a

clerical nature. Since he has been in the employ of Haskins & Sells he assisted in gathering evidence and making investigations for the use of the State in the Missouri rate cases, acting under the direction of a superior official of that firm. But whatever the experience or lack of experience of these gentlemen may be, the statistics, as far as they go, and the assumptions although adopted arbitrarily where they could find no accurate data from the records, are of considerable value so far as they have not been successfully attacked by witnesses of greater experience introduced by complainants in rebuttal. That they cannot be adopted by the Court as a whole will no doubt be admitted by the learned counsel for the State, for not only have many of them been shown to be based upon arbitrary assumptions which are incorrect, but many important items which contribute materially to the greater cost of the State business are conclusively shown to have been wholly overlooked by them. But, in the opinion of the Court, the scheme itself furnishes the best method of solving this problem that has been called to the attention of the Court, depending, of course, upon the correctness of the numerous factors necessary to obtain accurate results.

To determine these important issues under consideration the Court intends to adopt their scheme and ascertain in that manner, in connection with all the other testimony in these cases, the difference in the cost of the intrastate as compared with the through business, and it is of the opinion that in this way it will reach conclusions as nearly accurate as from the evidence is possible. That it
6030 will be mathematically accurate the Court does not claim for it, but that is impossible, no matter what bases or schemes are adopted.

Freight.

A most serious objection made is that the calculations of the State's accountants are based on the business of one month only and treated as representative of a year or even a six months' period, their schedules being based on the business of the Iron Mountain during the month of October, 1907, and of the Southwestern the month of October, 1908. The reasons therefor are stated to be that the roads furnished these statements, Exhibit 26 being that of the Iron Mountain, and Exhibits 19 and 20 of the Southwestern. The auditors and statisticians of the roads who prepared and filed these statements deny emphatically that they represent a fair average of one-twelfth of a year's or one-sixth of a half year's earnings or expenses of either road, and give the following explanation for preparing these statements. On the part of the Iron Mountain it is claimed that it was prepared at the request of the State's accountants and filed in compliance with that request; that of the Southwestern was prepared for the purpose of ascertaining as near as possible the relative business and cost thereof as soon as possible after the temporary injunctions in these cases had been granted; that they were granted in September, 1908, and the test was made the first month thereafter; that it will show a fair relative condition of the business of the entire

year is practically admitted, but it is emphatically denied that it shows such a fair average of the year's business as will enable the Court to reach even an approximately correct conclusion as to what the average cost of the year's or half year's business is. The 6031 testimony establishes conclusively that the freight earnings of these roads for the month of October of any year are greater than those of any other month of that year. Exhibit 54, which gives the ton miles of the intrastate freight of the Iron Mountain for the six months ending December 31, 1907, shows that the average of ton miles for one month was 7,976,716, while that for the month of October of that period was 9,622,508 ton miles, a difference of over twenty per cent. The revenue received for the same period shows a still greater difference. The average revenue for one month during that period was \$106,708.03, while that for the month of October was \$131,286.45, a difference of nearly twenty-two per cent in favor of the month of October. The interstate freight mileage for the six months' period averages 102,050,616 ton miles, while that carried in October exceeds that average 8,646,842 ton miles, nearly eight per cent. The Southwestern did not file any statistics for the latter half of the year 1908, the year its October test was made, but has filed statistics for the last half of 1907 and the first half of 1908. But it would not be fair to make a comparison with the first half of 1908, as the evidence shows that while in 1907 the traffic was the most prosperous the roads had ever enjoyed, that of the first half of 1908 was very much less, owing to the financial crisis then felt most severely by the railroads of the country. But the conditions of the two roads, the sections traversed by them, are, so far as freight transportation is concerned, so nearly alike, with the exception of some of the low-class commodities, that it may be assumed that the results would be the same, after making allowance for the differences mentioned.

It is also shown in evidence that owing to the exception- 6032 ally large business of the railroads during the year 1907 it was almost impossible for these roads to carry all the freight offered to them for transportation. The freight yards were all congested, and in order to move the freight from five to eight hundred tons of interstate freight (this includes the dead weight) would be sent on each local train, thus relieving to some extent the congested condition, but materially increasing the amount of through freight carried on local trains. As these conditions were exceptional and the month of October, as shown, cannot be considered as an average of the year's business, they should not be considered as representative of those prevailing in normal times. But there is sufficient evidence to enable the Court to make proper allowances which will equalize these conditions.

As the October business exceeded that of the average month of the six months' period over 20 per cent. multiplying it by that factor of course increases the entire totals by that amount, and as the greater the tonnage the smaller the proportionate cost, all calculations should be made, when that month is used as the basis, after a reduction of 20 per cent, which will leave over 2 per cent of the

earnings (the earnings for that month being 22 per cent greater than the average) for the additional expenses incurred by reason of the increased tonnage. It is also established by the evidence that errors were made in the tonnage of many cars transported during that month. On thirty-four cars the errors were found to run from 2,000 to 34,000 pounds a car. The investigation of Mr. Hamilton was confined solely to the records of the local cars, and they constituted, according to his testimony, 11.18 per cent of all the cars moved on the Iron Mountain that month and 10.09 per cent. 6033 of the Southwestern. Other serious objections made to the fairness of adopting the business of the month of October as a basis for a year's or six months' period are the inaccuracy of his figures, but these can be corrected when the final calculations are made if not corrected in the calculations made in detail.

Apportionment of Expenses.

The schedules of apportionment of expenses submitted by the accountants for the State will each be taken up separately and findings made on them. The items which it is claimed by complainants were omitted will be considered separately hereafter.

Freight Operating Expenses.

1. Maintenance of Way and Structures.

Objections are made to this item as compiled by the accountants for the State upon the ground that it is guess-work solely, and that there is no basis upon which there can be a proper apportionment except upon the straight revenue theory. It would serve no useful purpose to state the many objections made except the one which, in the opinion of the Court, is controlling. The overwhelming weight of the testimony shows that but a small part of the expenditures for maintenance of way and structures is caused by the operation of trains. Stations, platforms and fences are but very slightly, if at all, affected by the operation of trains. Nor are the roadbed, ties and ballast nearly as much affected by the operation of trains as by other causes. The greatest expense, it is shown by the testimony, is due to deterioration and action of the elements regardless 6034 of the operation of trains. It is claimed by the witnesses introduced on behalf of the complainants that from 75 per cent to 90 per cent of this expense is due to the action of the elements and only from 10 per cent to 25 per cent to the operation of trains. In view of these facts any attempt to apportion this item of expense on the ton, car or train mileage basis would be an injustice to the roads. The Court is of the opinion that the straight revenue basis will get more accurate results. The difference in intrastate and interstate rates will be taken care of by proper allowance to be made on the final calculations of the entire cost.

2. Maintenance of Equipment.

(a) Locomotives. These expenses are divided between yard service, local and through service. On the part of the State the yard locomotive mileage is based on cars, while, on the other hand, complainants urge the revenue basis. In the opinion of the Court the car mile basis, as adopted by the State's accountants, including the allowance of 50 per cent to the yard locomotive mileage and 75 per cent for local locomotive mileage is proper.

(b) Freight cars. This is divided between stopping and starting, terminal handling and other expenses. On the part of the State the percentages suggested by Mr. Wellington in his work on Railway Expense Location are adopted, charging for stopping and starting 21.5 per cent, for terminal handling 13.5 per cent and other expenses 65 per cent. The objection to the Wellington figures on the part of the railroads is that they were prepared in 1877 and 6035 since then many changes, which make them inapplicable, have been made, and for that reason, should not be applied to conditions now prevailing. The evidence on that point is conflicting, but after a careful examination of all the testimony, taking into consideration the fact that while the cars now in use are built much stronger than those in use at the time Mr. Wellington wrote his book, the appliance of the air brakes instead of hand brakes, the less care exercised by trainmen by reason of the use of the automatic couplers, which dispenses with the necessity of going between the cars, and other items mentioned in the testimony, the Court is of the opinion that 25 per cent is a proper charge for damage to cars caused by stopping and starting; for terminal handling 13.5 per cent is found by the Court from the evidence as approximately correct.

In making the calculations on these items the accountants for the State assume that while the local trains stop every five miles, each through train stops every twenty miles, and therefore that the local service should be charged with four times as much as the through service in proportion to the car mileage for expenses due to stopping and starting; they also assume that each car in local service receives two terminal handlings to one terminal handling of a car in through service, and for that reason the local service should be charged with two times as much as through service in proportion to car mileage for expenses due to terminal handling. The Court finds from the evidence that while local trains stop every five miles, the through trains stop only every thirty-five miles, and for that reason the local trains stop only every thirty-five miles, and for that reason the local 6036 trains are chargeable with seven times as much for that item as the through trains. In charging the through trains with one terminal handling in the State they include the trans-state freight and charge that with one terminal handling. As the trans-state business of the roads constitutes a very large percentage of the business, over 51 per cent of the entire freight business in the State of Arkansas for the Iron Mountain, and nearly 65 per cent of the Southwestern business, it is a matter of considerable importance to determine what should be properly charged for this item. The

trans-state business, which merely passes through this State, both of the terminals, that of starting and destination, being in other States, it will be seen that there should be a difference in the charge of terminal expense in this State.

A great deal of evidence has been introduced on the part of the State to show when through trains carrying this trans-state freight come into division yards they are broken up and handled in the same manner as the interstate business, and for this reason it was very earnestly argued that it should be charged with one terminal. On the other hand the evidence introduced on behalf of the railroads shows that while there are some yard expenses connected with the trans-state business, it is entirely free from the great expense caused by terminal handlings. It is true the handling of these trans-state cars at terminal points differs very materially from the "crossing of a bridge", a figure of speech indulged in by one of the witnesses for complainants, still the evidence leaves no doubt in the mind of the Court that the work connected with the trans-state cars is not of that nature which should properly be called and charged as a terminal

handling at any other place except that of starting and destination. 6037 The switching necessary for delivering and receiving the cars is saved. It is true there is considerable switching at every division point, but as established by the evidence, in making up a through freight train the trans-state cars are placed in such position in each train that all cars intended for a certain territory or for a certain branch road that they can be moved at one time and placed in a solid mass on the track from which they are to be finally moved. Besides, it is admitted that local freight originating at and destined for a point not a terminal, but which must pass an intermediate terminal yard, receives at such yards the same service as trans-state cars do. As the trans-state business is much heavier than either the interstate or local the number of cars in these trains merely passing through the terminals is naturally larger. From the exhibits filed by Mr. Moore, who was night yardmaster at the Little Rock terminal in 1907, the trans-state freight in these trains would average from 60 per cent to 70 per cent; the cars would be moved in one body to tracks on which they were to be transported farther; interstate business intended for that point would have to be taken to the different commercial tracks and from there hauled to the industries to which they were consigned; they are handled by carrying them in small lots of from one to three cars; they would be carried in some instances a distance of several miles, and after having been emptied they would have to be sent for and switched back to the freight yards of the company. If intended for other points in the State they would be handled like trans-state cars, being switched over to the track on which the trains for these localities would be made up. The same expense would be incurred and the

same injury to the cars caused in receiving and handling as 6038 local freight passing through these terminals. Mr. Moore filed with his testimony (Exhibit 53) what is called a "consist" of the through freight trains handled during the month of October, 1907, which shows the movement of the cars after they

reached the Little Rock Division yards. He takes for illustration the movement of one train and thus explains it in his own language:

"It is shown by this consist that the cars destined to Texas are in the train beginning from the caboose, including forty-two cars destined for Texas, and ahead of that are the cars for the Valley Division and Little Rock proper and local south on short points beyond Little Rock. The first car mentioned in the consist at the top is the car next to the caboose at the rear of the train. The last car on the list is the car which is next to the engine. Those 42 cars destined to Texas would remain on the train on which they were received, and the 16 cars (there were 58 cars in the train) would be taken off the head of the train and put on such tracks as are designated for that purpose. The 42 cars would remain on the track on which they were received and there would be added to that train more tonnage and forwarded from the track on which we received it; they would not be switched; they would be sent out on the day they came in."

This consist shows that a very large percentage of the cars on all through freight trains and trans-state were moved as testified by Mr. Moore. Mr. Cannon, who in 1907 was Superintendent of the Arkansas Division of the Iron Mountain, testified to the same facts, and also that at the Hoxie Division yards the percentage of through freight is still greater and subject to less switching than at 6039 Little Rock. On the other hand a former yardman of the Iron Mountain testified that as a rule the number of cars intended for trans-state transportation constituted a small percentage and are handled almost as much as those intended for local transportation.

All agree that the injury to freight cars incident to delivering and hauling them back to the yards is not incurred for the trans-state cars. When cars are received from other lines for trans-state transportation there are no terminal expenses except the yard charges and that is so well known that all of the witnesses who testified on that subject, those for the railroads as well as those for the State, agree that when the transportation is over three or more lines, in the division of the earnings, extra allowances are made to the terminal roads, receiving as well as delivering, while a smaller proportion is paid to intermediate carriers for the reason that there are no terminal expenses. Mr. Lincoln, one of the witnesses introduced by the State, who has had a great deal of experience as a railroad man, and although at present not connected with any railroad, occupies the position of manager of the St. Louis Freight Bureau, which necessarily requires that he keep himself fully informed in all matters of this nature, agreed with the witnesses of complainants, on that subject that there should be no expenses charged in Arkansas for the terminal service of trans-state business.

Mr. Parker, a witness introduced by the State, who is the expert engineer for the Texas State Railroad Commission, also testified that while trans-state business would have the same expense as interstate attached to it in the yard service there is none at the terminals.

6040 But there are some items of the interstate business which are only charged with one terminal, which, in the opinion of the Court, should be charged with two. The evidence shows that all the cotton handled in the State is credited to interstate earnings. While 30 per cent of that is transported uncompressed and therefore has only one terminal handling in the State, the other 70 per cent has two terminal handlings in this State. The evidence shows that cotton is brought to the concentrating points either on local trains or on what is called "pick-up" trains, trains which during the cotton season are used exclusively for picking up the cars loaded with cotton along the line, and before it is transported out of the State it is compressed. These cars are taken to the compress, there unloaded, the empty cars hauled to the yards, and after the cotton is compressed empty cars are carried to the compress for reloading. That part of the interstate traffic has two terminal handlings as much as the local business, except that it is carried in trainloads to the compress instead of being hauled in small lots, but that is fully made up by the additional expense caused by first delivering the cotton to the compress and then delivering the empty cars for the purpose of transporting it out of the State after having been compressed. The evidence shows that cotton constitutes about 7 per cent of the interstate business, or about 2.5 per cent of the interstate and intrastate business of the Iron Mountain. It is, therefore, proper that of the 34 per cent of the interstate business 2.5 per cent should be charged with two terminal handlings instead of one for this cotton.

Another item of interstate traffic which receives to a great extent two terminal handlings in the State is lumber and forest products. The evidence shows that a material part of forest materials, especially staves and headings, are brought in the rough to the mills and then, after having been finished as manufactured material, are reshipped on the interstate rate for the entire haul and the earnings credited to interstate traffic. Many of the larger mills have short roads which carry the rough material to the mills; these are called "tap lines". Allowances made to them for these hauls will be considered by the Court and included in determining the difference in rates between inter and intrastate business and for that reason need not be considered in determining this item.

A small proportion of the grain brought in from other States is also handled twice. From all the evidence the conclusion reached by the Court is that 2 per cent of the interstate business should be charged for the transportation of lumber and grain with two terminal handlings in the State.

Another item of interstate business which should be charged with two terminals is the Memphis and Ft. Smith freight for the State of Arkansas. As has been stated hereinbefore, all of the Memphis business for points in Arkansas, and most of the Ft. Smith business destined to points in this State, is treated as interstate business, but the entire expense thereof charged to this State. It is hard to determine from the evidence how much this business amounts

to, but a liberal estimate will make it 2 per cent and this should also be charged with two terminals.

6042 This item of terminal expense should therefore be divided upon the following basis:

Trans-state receiving no terminal handling.....	51.16%
Interstate receiving one " "	34.19%
Intrastate receiving two " "	6.50%
Intrastate receiving two " "	8.15%
	<hr/> 100%

The balance of expense on this item may properly be divided upon the basis adopted by the State's accountants, except that the ton mileage should be used instead of the car mileage, as the weight of the car adds to the expense, and there is less injury in transporting empty cars than those loaded.

Supervision in general.—The expenses under this head may properly be divided between local and through service on the basis of direct charges for maintenance and equipment after ascertaining the percentages according to the rules stated hereinbefore.

3. Traffic expenses.—The accountants for all parties agree that those expenses should properly be divided on a straight revenue basis.

4. Transportation expenses.

a. Station expenses.—These expenses should properly be divided on the basis of the ton mileage of each class of traffic, charging each intrastate ton with six handlings, the interstate with one handling, and the transstate with one-half handling. The intrastate is chargeable with six station expenses to equalize the difference in the length of the haul, taking into consideration only the difference in this State, which on the Iron Mountain is three times as long for interstate as for local, and therefore for the same distance the local cars would have to have three hauls to one for the interstate. This may do some slight injustice to the interstate business, after having made allowance for two handlings for 6.5 per cent of that business, but it is not sufficient to affect the final result to any appreciable extent.

b. Yard and terminal expenses.—These expenses will be apportioned in the same manner as those of road locomotives. This does the interstate business some injustice because every car passing through the terminal yards, whether transstate or interstate, has been included in this expense by the accountants and charged twice, once for being hauled in and again for being hauled out, although they receive but very little handling, as shown heretofore. But in view of the fact that no allowance was made for any handling under the head of terminal handling of cars, charging them with this station expense will equalize the two items.

c. Fuel and locomotive expenses and wages of train crews.—In apportioning the expenses these two items will be considered together. The Court finds from the evidence that the cost of fuel and wages

paid per train mile on local trains is 50 mills, while on the through trains it is 34 mills, a difference of 47 per cent. The local trains should therefore, be charged with 47 per cent greater cost for these two items.

d. Enginehouse expenses.—The basis adopted by the State's accountants in apportioning this item of expense between local and through trains is approved.

e. Other train expenses.—These should be divided between 6044 state and interstate traffic on the basis of the gross earnings of each class of traffic during the six months' period ending December 31, 1907. The difference in the dead weight of the different classes of trains will be considered hereafter.

f. Loss and damage to freight.—The basis upon which this division is made by the accountants for the State is upon the claims paid during the six months in controversy, the claims during the month of October having been examined for the purpose of determining which are properly chargeable to local trains and through trains. The figures used by the State's accountants are undisputed and will be adopted by the Court.

g. Supervision and general.—These expenses should be divided on the basis of the direct charges to each of the transported classes as found in the foregoing items.

5. General expenses.—The apportionment of these expenses should be made on the basis of the supervision and general expenses under the head of equipment and transportation.

Method of Dividing that Cost.

The State, in dividing these costs, adopted the movement for the month of October, 1907, as a fair average for the entire period with the result that the interstate freight cars are charged with nearly 75 per cent of the freight carried on local trains. The evidence is practically conclusive that owing to the congestion caused by the heavier freight traffic in 1907, from five to eight hundred tons gross of through freight were added to each local train in order 6045 to relieve the congestion. It is claimed, and there is testimony to support it, that the intrastate freight carried on local trains of the Iron Mountain is about 25 per cent and the intrastate 75 per cent.

To adopt the State's contention would certainly be unfair. When conditions are normal the evidence shows that practically the only through freight carried on local trains is that intended for or coming from points intermediate between division yards. The practice is that through freight trains receive or deliver freight only at division points, and that all interstate freight consigned to intermediate points is taken from the through train at the division yard nearest the place to which it is destined and then hauled to the final destination on the local trains, and if shipped from this State it is carried on local trains to the division yards and then put on the through train. In view of the fact that the largest shipping point in the State, Little Rock, is the principal division point, a great

deal of the freight intended for this State will naturally go there on through trains.

That the intrastate freight on local trains, when conditions are normal, is only 25 per cent, is too low, in the opinion of the Court. The interstate business carried on local trains averages about 40 per cent of the entire freight carried, and the calculations should be made on that basis, but the interstate must be charged with only one terminal. Of the local freight carried on through trains 1 per cent is a proper apportionment and the calculations will be made accordingly.

6046 10. Taxes.—Taxes should be apportioned between freight and passenger and inter and intrastate earnings on the straight revenue basis. A part of the taxes paid by the railroads is for local improvements, such as levees, drainage and roads. The local traffic, by reason of the development of the country and increased acreage of fertile lands, otherwise untillable, is benefited to a much greater extent than the through, especially the trans-state, and should, therefore, bear its full proportion of that expense.

10a. Rental of tracks, etc.—This should be divided on the straight revenue basis as has been done by the accountants for the State.

11. Hire of equipment.—As the cars used on local trains are delayed much more by reason of the slow schedules, great delays in returning cars to consignors and consignees, each being entitled by the laws of the State to retain the car forty-eight hours for loading and unloading; the fact that the local trains are not running at night and the haul shorter, the apportionment of this item on the straight revenue basis adopted by the accountants for the State is approved, but there should be an extra charge of 30 per cent to the local traffic. The Court having determined what the basis of apportionment of expense should be has referred it to the accountants employed by the complainants as well as the defendants, and they have presented to the Court the result of their calculations which are filed with this opinion as Exhibit A. Those calculations show that the percentage of extra cost of the intrastate business over the trans-state and interstate is 201.5 per cent for the Iron Mountain Railway.

6047

Omissions.

The Court finds from the evidence that in preparing their schedules the accountants for the State omitted several items which add materially to the cost of the local as compared with the through traffic and which should be taken into consideration in determining the difference in cost. The evidence shows that the dead weight on local trains exceeds that on the through over 14 per cent, the percentage being on local 75.5 per cent, and through 64.75 per cent; there is considerable loss on the investment in rolling stock from several causes not included in any of the State's schedules. The evidence shows that while the through freight trains are run day and night, the local trains run only during the day; that the local trains do not run on Sundays, while the through trains do; that the

average run a day of the locals is 60 miles and that of the through 240 miles. Local trains are run regularly every day except Sundays as scheduled, whether loaded or not, while through freight trains, there being a number of them daily, are not all sent out unless there is sufficient tonnage to justify it. The expenses of trains thus not sent out, including fuel and wages, is saved. Demurrage on cars received or delivered, as hereinbefore stated, is an item which adds to the loss on the investment. While the difference in the length of the haul in the State has been considered, that in the other states even on the lines of these roads has not been taken into consideration. As all agree that the longer the haul the less the cost per mile, the fact that this haul is in other states cannot in anywise

6048 affect the decrease of the cost, as the crossing of imaginary state lines can neither add to nor decrease it. What this mileage amounts to cannot be ascertained from the evidence, but that it is very considerable, especially for the trans-state traffic, must be apparent. The great bulk of the grain comes from Kansas and Nebraska and is transported through the State to the Gulf ports for export; cotton shipped from the State is transported almost exclusively to the seaports for export or the cotton mills of New England on the Atlantic Coast; most of the lumber shipped from the State goes to the prairie states of the West and to the commercial centers of the East and North; iron, steel, and machinery comes principally from the Pittsburg district in Pennsylvania.

The evidence also shows that the percentage of freight in less than carloads on the local trains exceeds that on the through trains of the Iron Mountain considerably. It is also shown that the loading of less than carloads of freight on through trains is much heavier and less expensive to handle, as it is consigned to large cities which enables the roads to a very great extent to fill cars so that they require only one loading and unloading, while on local trains the less than carload freight is consigned to many small stations in small lots, requiring a number of unloadings with a continual decrease of tonnage.

The reciprocal tonnage, it is shown, is much less on local than on through trains. Other items which it is claimed by complainants have been omitted have either been considered or proper allowance made therefor by the Court in the items of the schedules or are not proper items for additional allowance.

6049 Upon full consideration of the additional cost of these additional items the Court is of opinion that an additional charge of 8.5 per cent will be reasonable and fair, making the total difference in cost between intra and interstate freight 210 per cent in favor of the intrastate.

Passenger.

The evidence shows that for the year 1907 the actual fares collected for each passenger mile on the Iron Mountain were for the local 1.930 cents and on through 1.865 cents, a difference of 3.48 per cent. The Court does not deem it necessary to have the same item-

ized calculations made to ascertain the difference in cost between the intrastate and interstate passenger traffic as were made on the freight. The evidence does establish the fact that there is some difference in the cost. Some of these items which cause additional cost are that transstate passengers cause no terminal expense and but very little station expense; interstate passengers only use one terminal while local passengers incur two; the average haul of intrastate passengers is 30 miles, that of through 118 miles in this State, leaving out of consideration the length of the haul in other states, which, for the transstate is no small item; the additional expense in the sale of tickets, checking baggage for short trips, the overhead expenses connected therewith, the more frequent cleaning of coaches after every trip; the additional expense for fuel and wages, the slower time, the more frequent stops, the shorter trains, the loss on the investment by reason of less mileage, the greater danger of injury to passengers by the more frequent getting on and off, the greater injury to the equipment by the more frequent stops and starting, are all matters which add to the cost. On the other hand allowance must be made for the local passengers riding 6050 on through trains and interstate passengers on local trains.

Giving due weight to all these items and others appearing in the testimony, the Court is of opinion that after deducting the increased revenue the intrastate passenger service should be charged with 10 per cent greater net cost than the through.

Southwestern Railway Company.

Freight.

It will serve no useful purpose to make calculations item by item for this road as has been done in the case of the Iron Mountain, as, with few exceptions, the conditions are the same and the exceptions only need be considered. The evidence shows that the freight traffic of that road between transstate, interstate and intrastate is less favorable to the State than that of the Iron Mountain. The percentages on this road are:

Transstate	64.93%
Interstate	32.12%
Intrastate	2.95%
	<hr/>
	100 %

It is also shown that the average length of the haul is greater for the interstate than on the Iron Mountain, the state haul of this road being 40.79 miles and the interstate 222.42 miles. The average haul of all interstate freight over that line, disregarding state lines, is 344.41 miles.

There are some other matters which add some to the increased cost of the local business, but they are so small that it is unnecessary to mention them. Upon the whole the Court is of the opinion that

an additional allowance of 40 per cent above that of the Iron Mountain for extra expenses of the local traffic, making the difference in cost 250 per cent, will be fair. The State tariff is found to be, as that of the Iron Mountain, 50 per cent higher than the interstate.

Passenger.

The Court finds that the extra cost of the intrastate passengers on this road is something less than on the Iron Mountain, although the length of the carriage of interstate passengers as compared with the local is greater than that of the Iron Mountain, the local being 23 miles and through 120 miles.

It also appears that all of its trains do a local passenger business; its so-called through trains stop with few exceptions at almost every station in the State and a great deal of the local traffic is carried on these trains. It also appears that the difference in the fares between local and through passengers is greater than that on the Iron Mountain, the percentage being a little over 10 per cent. The Court is of the opinion that the difference in cost between the two classes of passenger service is no greater than the higher fares which have been collected, and for this reason no extra allowance should be made therefor.

Upon these bases the Court finds the net profits on the entire business of the two roads to be as follows:

IRON MOUNTAIN RAILWAY.

Intrastate Freight.

Cost on basis of 210 per cent additional cost calculated on ton mile basis for operating expenses and revenue basis for taxes, rentals and hire of equipment.. \$643,679.33

6052 *Intrastate Passenger.*

Cost on basis of 10 per cent additional cost calculated on revenue basis\$1,044,879.50

Total cost of intrastate.....\$1,688,558.83

Earnings from Intrastate Traffic.

Freight \$656,717.58

Passenger 1,069,861.28

Total earnings\$1,726,578.86

Cost deducted 1,688,558.83

Net earnings \$38,020.03

The valuation of the investment apportioned to the intrastate business is \$5,158,266.56, which makes the net earnings less than three-fourths of one per cent.

SOUTHWESTERN RAILWAY.

Intrastate Freight.

Cost apportioned as above on basis of 250 per cent additional cost	\$156,171.86
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Intrastate Passenger.

Cost on straight revenue basis with no extra allowance.	\$273,049.21
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Total cost of intrastate	\$429,221.07
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6053

Earnings From Intrastate Traffic.

Freight	\$175,515.42
Passenger	290,960.77

Total earnings	\$466,476.19
Cost deducted	429,221.07

Net earnings	\$37,255.12
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The valuation apportioned to the intrastate business is \$1,430,321, which makes the net earnings 2.6 per cent on the investment.

Net Profits on Investment.

There is no charge on the part of the State that these roads are not efficiently, economically and honestly managed; nor is it denied that they traverse a fertile agricultural section with natural resources such as timber, coal, stone and minerals sufficient to justify their construction; that they were constructed in pursuance of a public demand and are in every way necessary for present conditions, and that they were not built merely for speculative purposes dependent on the future development of the natural resources so bountifully bestowed on the people of this State by Providence. Nor is there any claim that owing to the topographical conditions the cost of building them or the investment necessary for their construction and operation is greater than the average cost of roads in the southwest. What would under these conditions be a reasonable net return on the investment?

In *Wilcox v. Consolidated Gas Co.*, 212 U. S. 19, 49, Mr. Justice Peckham, speaking for the Court, said on that subject:

"There is no particular rate of compensation which must, in all cases and in all parts of the country, be regarded as sufficient for capital invested in business enterprises. Such compensation must depend greatly upon circumstances and locality; among other things the amount of risk in the business is a most important factor, as

well as the locality where the business is conducted, and the rate expected and usually realized there upon investments of a somewhat similar nature with regard to the risk attending them. There may be other matters which, in some cases, might also be properly taken into account in determining the rate which an investor might properly expect or hope to receive and which he would be entitled to without legislative interference. The less risk, the less right to any unusual returns upon the investments. One who invests his money in a business of a somewhat hazardous character is very properly held to have the right to a larger return, without legislative interference, than can be obtained from an investment in Government bonds or other perfectly safe security. The man that invested in gas stock in 1823 had a right to look for and obtain, if possible, a much greater rate upon his investment than he who invested in such property in the City of New York years after the risk and danger involved had been almost entirely eliminated.

In an investment in a gas company, such as complainant's, the risk is reduced almost to a minimum. It is a corporation which, in fact, as the Court below remarks, monopolizes the gas service of the largest city in America, and is secure against competition under the circumstances in which it is placed, because it is a proposition almost unthinkable that the City of New York would, for purposes of making competition, permit the streets of the city to be again torn up in order to allow the mains of another company to be laid all through them to supply gas which the present company can adequately supply. And, so far as it is given us to look into the future, it seems as certain as anything of such a nature can be, that the demand for gas will increase, and, at the reduced price, increase to a considerable extent. An interest in such a business is as near a safe and secure investment as can be imagined with regard to any private manufacturing business, although it is recognized at the same time that there is a possible element of risk, even in such a business. The court below regarded it as the most favorably situated gas business in America, and added that all gas business is inherently subject to many of the vicissitudes of manufacturing. Under the circumstances, the Court held that a rate which would permit a return of 6 per cent would be enough to avoid the charge of confiscation, and for the reason that a return of such an amount was the return ordinarily sought and obtained on investments of that degree of safety in the City of New York."

And the Court concurred with the conclusions of the trial court, that in view of the conditions found in that case 6 per cent upon the value of the property of the Gas Company devoted to public use would be a just compensation.

But it is urged on behalf of complainants that in States like Arkansas, owing to many conditions, including the higher rates of interest for the use of money, they are entitled to a greater compensation than a gas company in a city like New York. It is urged that a railroad company cannot be as secure against competition as a gas company in a large and populous city. It requires no permits for the tearing up of the streets of a com-

mercial city and thus seriously interfere with its traffic, nor would the experience of the past justify the conclusion that an investment in railroads is "as near a safe and secure investment as can be imagined with regard to any private manufacturing business," for it is claimed that it is a well-known fact that the number of railroads of the United States, especially those west of the Mississippi River which have escaped insolvency proceedings, at all times is very small, if there be any. Whether some allowance should be made for that period which may be called the "developing period" when the earnings are barely sufficient to cover actual operating expenses, followed by that period during which the net profits above the operating expenses are barely sufficient to pay the interest on the bonded indebtedness with no margin of profit to the shareholders, it is unnecessary to determine in these cases as there is no evidence in the record that these complainants have suffered from such conditions. It is true the records of this and other courts show that insolvency proceedings against these roads were had at one time or more than once perhaps and foreclosures had, but there is no such evidence in this record and therefore cannot be considered.

That under the laws of this State competitive roads may at any time be constructed is no doubt true, but the stringent regulations under the national and state laws now in force have made the construction of railroads for the mere speculative purpose of selling bonds and stocks, regardless of a legitimate demand or necessity, too unprofitable for promoters and speculators to indulge in.

The Court therefore concludes that net earnings which will give the owners a return of 6 per cent per annum on the actual value of the property are fair, provided, of course, that the rates necessary to make whatever net profits the Court finds the owners to be entitled to are reasonable and not so high as to be oppressive to those compelled to make use of the roads, for, as stated in the first part of the opinion, "the rights of the carriers and the public are reciprocal. The carrier is entitled to ask a fair return upon the value of its property which it employs for the public convenience, and the public is entitled to demand that no more be exacted from it for the use of the public highways than the services rendered are reasonably worth and not be oppressive." But when such a limitation of profits is adopted as the construction of railroads is beneficial and necessary for the development of a country, and for that reason it would be against the public welfare to discourage them, provision should be made for making this limited profit as nearly permanent and uniform as is possible by providing a surplus for those years when, owing to contingencies likely to arise at any time, the net earnings will not yield a sufficient fund for such earnings. By this the Court does not mean to be understood that the State must be an insurer of profits on railroad investments; but when the profits on investments, based as they are in these cases on the actual value of the property, ascertained by the State itself, and not a speculative value of bonds and stocks issued in many instances regardless of cost or

values, are limited to the current and legal rate of interest of the State, such investments are entitled to a greater consideration than when there is no such limitation and the investor takes his chance of large profits when times are prosperous and small or no profits during lean years. Besides, rates of carriers cannot and ought not to be changed every year or at short periods to meet conditions as they vary, for not only would the commerce of the country be seriously affected by such changes and consequent uncertainties, but it would necessitate frequent investigations and hearings, expensive and uncertain of results, with strong probabilities that before one investigation is completed and conclusions reached, conditions will again be changed and necessitate another. Earnings which would yield a profit of 6 per cent in a year like 1907, which was the most profitable year in the history of railroads of this country, or which would yield such a profit when crops and financial conditions are normal, all branches of manufacture and trade flourishing, the elements favorable, would soon decrease to an extent which would reduce net profits considerably below 6 per cent if not wipe them out entirely when conditions are reversed. The most learned and advanced political economists have not yet discovered a remedy to prevent the periodical financial crises, although many theorists sincerely believe that they have; the scientists of the Agriculture Department, even with the aid of the learned men of the Weather Bureau, are still unable to prevent drouths or too much rainfall, hot winds, destructive storms or other unfavorable conditions which may cause failures of crops and which in an agricultural State, such as this is, will very materially affect the earnings of its railroads. Continued rain storms, which are not so unusual in

this section that they should not be taken into consideration, may cause washouts and damage to the tracks and bridges which to replace will materially reduce the net earnings.

Breaks in the levees of the Mississippi or other rivers now protecting these roads and the lands served by them may cause sufficient destruction to wipe out all profits of that year. It frequently happens that many miles of railroad have to be abandoned or reconstructed to an extent to make the cost equal to the construction of a new road for that section; bridges must in time be renewed, and with the continual increase of weight of locomotives and cars must at times be rebuilt. The Interstate Commerce Commission in "In re Investigation of Advance in Rates, Eastern Cases," 20 I. C. C. Rep. 271, said on that subject:

"It may well be said that they should be allowed to accumulate a fund out of its revenues for operation against the time when this piece of railroad must be entirely thrown away. Under our present system of accounting railways are required to make a depreciation charge with respect to the equipment for the purpose of providing against contingencies of this sort; but they make no such charge with respect to way and structures and it seems proper that the accumulation of surplus should be allowed for this, also."

Ought not all these matters be taken into consideration and provision made for emergencies which experience teaches the roads are

at all times subject to and which at any time may occur? To provide for these the Court is of the opinion that in addition to the 6 per cent earned when everything is prosperous and no extraordinary losses by casualties have been sustained, an allowance of 1.5 per cent additional for a surplus fund should be made. As 6060 stated by the Interstate Commerce Commission in "In re Investigation of Advance in Rates, Western Cases," 20 I. C. C. Rep. 307, 336:

"A railroad is justified no doubt in maintaining a surplus which will insure dividends to its stockholders during lean years and it may accumulate through the years funds to meet obsolescence in plant unless this charge is taken care of in maintenance. * * * Such a surplus gives strength and tone to the securities of a carrier. It invigorates and stimulates the management."

In the Eastern Cases of that investigation, 20 I. C. C. 243, 271, 288, the Commission said on that subject:

"Then, too, a railroad must be allowed to accumulate a surplus in good years which will offset bad years, and if its financial position is to be a reasonably strong one, that surplus must be large enough to remove doubt from the mind of the investing public. We think that a railroad in ordinary years should be permitted to show a substantial surplus over and above the payment of a reasonable dividend. * * * If this company is to preserve its financial integrity upon the basis of its present capitalization and maintain its credit it is proper that it should be allowed to earn a sufficient amount to pay its interest, its preferred dividend, a dividend on its common stock, and have remaining a small surplus. The credit of the company cannot be maintained for year after year upon any other basis. We are of the opinion that the sum remaining after payment of fixed charges, including as a fixed charge the dividend upon the preferred stock, should be equivalent to between 7 and 8 per cent upon the common stock. It should have sufficient earnings so that it may pay a dividend of 5 per cent upon its 6061 common stock and carry 2.5 per cent to surplus, or pay 6 per cent on the common stock and carry 1.5 per cent to surplus. This is on the assumption that the capitalization does not exceed its actual value."

In the cases at bar only the actual value is considered regardless of capitalization. That such a surplus may be necessary is shown by the facts appearing in the testimony in these cases. The Iron Mountain for the years 1904, 1905, 1906 and 1907 paid its stockholders 10 per cent annually; for the year 1908 the dividend was reduced to 5 per cent, and for the year 1909 to 4 per cent. The evidence fails to show the reasons for this reduction of dividends, but the Court does not feel justified in assuming that it was owing to an increase in net earnings caused by the granting of the injunction in these cases. The Southwestern has never paid any dividend on its common stock, and only for the last two years a dividend of 2 per cent in 1909 and 5 per cent in 1910 on its preferred stock. It is also proper to state that the calculations made in these cases are all based on earnings for the six months ending

December 31, 1907, which, as appears from the evidence, were approximately 20 per cent greater than under usual conditions.

In the opinion of the Court the rates enjoined at the commencement of these actions are non-compensatory and confiscatory, and for this reason the injunctions will be made permanent. The costs in these cases should be divided, each party paying its own costs for depositions, etc., and the Court costs proper to be paid one-half by the complainants and one-half by the defendants. As conditions may change which may require a reinvestigation of the question of the reasonableness of these rates the Court will retain jurisdiction of these causes with leave to the parties to move the Court for a reinvestigation. This course was adopted by Justice Brewer in *Ames v. Union Pacific Ry. Co.*, supra, and commends itself to the Court as proper in these cases.

Conclusion.

In the absence of separate accounts kept by the railroads the scheme suggested by the State's accountants in these cases commended itself favorably to the Court. The omissions and those bases which in the opinion of the Court were found to be erroneous in these cases may properly be attributed to the fact that such a scheme has never been attempted before this, and the further fact that these gentlemen have not had that experience which can only be obtained by those who have devoted many years to the management and operation of railroads. The testimony of these gentlemen of experience has shown these errors and omissions and the Court has tried to correct them. To do so it was necessary to read carefully all the voluminous testimony in these cases, not only once, but in many instances a number of times. If the expenses were kept separately for the different classes of traffic for the year, or if that is too expensive, if they were kept for the months of March and November of every year they would furnish a very fair average for the year for this section of the country and would relieve the courts in cases of this nature of a great deal of work. In fact, if such accounts were kept the Court believes that State Railroad Commissions would be guided by them to a great extent in making rates.

In conclusion the Court wishes to acknowledge the assistance it has received from Messrs. Johnson and Hamilton, the accountants for the complainants and the State, in these cases, in making the calculations for its use. The accuracy with which they performed this work is attested by the fact that the result of their calculations, made under direction of the Court, did not differ one cent. The extended and able arguments of the counsel for both sides were of inestimable assistance to the Court, and the final result reached by the Court, if correct, is in a great measure due to their aid.

EXHIBIT A.

State of Arkansas—Rate Matter.

St. Louis, Iron Mountain & Southern Railway.

Result of Operation Obtained on the Formulæ Prescribed by the Court.

Revenue.

The miscellaneous revenue has been divided between intrastate and interstate traffic, on the basis of the actual state and interstate revenue, and some additional items have been added to the passenger revenue.

The result of this division is as follows:

Freight Revenue.		Per cent of each class.	Per cent of all revenue.
Intrastate	656,717.58	13.41%	9.81
Interstate	4,239,555.33	86.59%	63.34
Total	4,896,272.91	100.00	73.15
Passenger Revenue.			
Intrastate	1,069,861.28	59.54	15.99
Interstate	727,026.60	40.46	10.86
Total	1,796,887.88	100.00	26.85
Grand total	6,693,160.79		100.00

Operating Expenses.

1.—Maintenance of Way & Structures.

The total expense assigned to the freight business under this head has been divided between intrastate and interstate on the straight revenue basis, and the result is as follows:

	Intrastate.	Interstate.	Total.
Freight revenue ...	\$656,717.58	\$4,239,555.33	\$4,896,272.91
Percentage of each.	13.41	86.59	100.00
Expenses divided on above percentages.	\$74,210.28	\$479,184.83	\$553,395.11

6065

2.—Maintenance of Equipment.

(a) Locomotives:

The expenses under this head were divided between yard and local and through road locomotives on the basis adopted by the State in its Exhibit "K," and are as follows:

	Local.	Through.	Total.
Yard	\$13,453.83	\$55,681.97	\$69,135.80
Road	43,733.35	70,807.25	114,540.60
Total	\$57,187.18	\$126,489.22	\$183,676.40

(b) Freight Cars:

This expense is divided between stopping and starting, terminal handling and other expenses on the following basis:

	Percentages.	Expenses.
Stopping and Starting.....	25%	\$119,473.91
Terminal Handling	13½%	64,515.91
Other Expenses	61½%	293,905.82
Total.....	100	\$477,895.64

The expense of "Stopping & Starting" is divided as shown in the State's Exhibit "K," and is as follows:

	Local.	Through.	Total.
Car Miles	4,693,400	6,532,646	11,226,046
Percentage of each.....	41.81%	58.19%	100.00%
Expenses divided on above percentages....	\$49,952.04	\$69,521.87	\$119,473.91

6066 The expense of "Terminal Handling" divided between trans-state, interstate and intrastate freight on basis of the ton mileage for the month of October, 1907, as shown in Exhibit 26 and subdivided by the Court, is as follows:

Trans-state freight (receiving no terminal handling)....	51.16%
Interstate freight (receiving one terminal handling)....	34.19%
Interstate freight (receiving two terminal handlings)....	6.50%
Intrastate freight (receiving two terminal handlings)....	8.15%
	100.00%

The total expense is therefore divided on the following percentages:

		Percentages.	Expense.
Interstate.....	34.19 x 1—34.19	53.85%	\$34,741.82
	6.50 x 2—13.00	20.48%	13,212.86
Intrastate	8.15 x 2 16.30	25.67	16,561.23
	63.49	100.00	\$64,515.91

The balance of the expense of freight cars is divided between local and through trains on the basis of the number of car miles as shown in the State's Exhibit "K," and is as follows:

	Local.	Through.	Total.
Car miles	1,173,350	6,532,646	7,705,996
Percentage of each..	15.22%	84.78%	100.00%
Expense	\$44,732.47	\$249,173.35	\$293,905.82

6067 The total expense of maintenance of freight cars chargeable to each class of service, under the plans outlined above, is as follows:

	Stopping and starting.	Terminal handling.	Other expense.	Total.
Local	\$49,952.04	.....	\$44,732.47	\$94,684.51
Through ..	69,521.87	.....	249,173.35	318,695.22
State .....	.....	\$16,561.23	.....	16,561.23
Interstate. ....	.....	47,954.68	.....	47,954.68
Total	\$119,473.91	\$64,515.91	\$293,905.82	\$477,895.64

(c) Supervision & General:

This expense is divided between local and through trains and State and Interstate on the basis of the direct charges for maintenance of equipment, and is as follows:

	Direct expense.	Percentages.	Amount.
Local	\$151,871.69	22.96	\$14,202.89
Through	445,184.44	67.29	41,625.12
State	16,561.23	2.50	1,546.48
Interstate	47,954.68	7.25	4,484.80
Total.....	\$661,572.04	100.00	\$61,859.29

3.—Traffic Expense.

These expenses divided on the straight revenue basis are as follows:

	Percentages.	Amount.
Intrastate	13.41	\$11,899.29
Interstate	86.59	76,835.13
Total	100.00%	\$88,734.42

6068

4.—Transportation Expense.

(a) Station Expense:

This expense is divided on basis of the proportions of the ton miles for the month of October, 1907, as shown in Exhibit #26, assuming that one-half of the trans-state and all the interstate freight is chargeable with one station handling compared with six station handlings for state freight, for a given number of ton miles, as follows:

	Ton Mile Per Cents.			Expense.
Trans-state	51.16 x 1/2—	25.58—	22.21—	\$51,888.54
Interstate	40.69 x 1—	40.69—	35.33—	82,540.40
Intrastate	8.15 x 6—	48.90—	42.46—	99,198.00
	100.00	115.17	100.00	\$233,626.94

(b) Yard & Terminal Expense:

This expense is divided between local and through trains on the basis of the number of cars handled at terminals as shown in the State's Exhibit "K" and is as follows:

	Local.	Through.	Total.
Cars handled	32,232	133,482	165,714
Percentage of each....	19.46%	80.54%	100.00%
Expenses divided on the above percentages...	\$57,085.42	\$236,262.07	\$293,347.49

(c) Fuel & Locomotive Expenses, Road Enginemen & Trainmen:

These expenses are divided between local and through trains on the basis of the number of engine miles of each class, assuming that the local train expense is 47% greater per engine mile than the through train expense.

6069

	Train Miles.	Percentages.	Percentages.	Expenses.
Local. . . .	70,583	26.42 x 1.47—	38.83 34.54	\$238,060.24
Through. . .	196,512	73.58	73.58 65.46	451,170.33
Total	267,095	100.00	112.41 100.00	\$689,230.57

(d) Engine house expenses:

These expenses are divided on the basis shown in the State's Exhibit "K" and are as follows:

	Local.	Through.	Total.
Engine miles	79,053	199,981	279,034
Percentage of each.	28.33%	71.67%	100.00%
Expenses divided on above percentage.	\$15,194.55	\$38,439.58	\$53,634.13

(e) Other train expense:

These expenses are divided between state and interstate traffic on the basis of the gross earnings of each class of traffic as follows:

	Percentages.	Amount.
Intrastate	13.41	\$17,743.16
Interstate	86.59	114,569.71
Total	100.00	\$132,312.87

(f) Loss and damage to freight:

6070 The division of this expense is shown in State's Exhibit "K" as follows:

	Amount.
Intrastate	\$30,972.03
Interstate	96,537.35
Total	\$127,509.38

(g) Supervision and general:

This expense is divided on the basis of the direct charges to other accounts under transportation and is as follows:

	Direct Expense.	Percentages.	Amount.
Local	\$310,340.21	20.28%	\$9,410.51
Through	725,871.98	47.46	22,022.83
State	147,913.19	9.67	4,487.16
Interstate	345,536.00	22.59	10,482.42
Total.	\$1,529,661.38	100.00	\$46,402.92

5.—General Expenses.

This expense is divided on the basis of the supervision and general expense under the head of maintenance of equipment and Transportation, and is as follows:

	Direct Expense.	Percentages.	Amount.
Local	\$23,613.40	21.81	\$28,836.80
Through.....	63,647.95	58.80	77,744.33
State	6,033.64	5.57	7,364.55
Interstate	14,967.22	13.82	18,272.56
Total.....	\$108,262.21	100.00	\$132,218.24

6071

6.—Total Operating Expenses.

The total operating expenses divided on the various bases outlined above are as follows:

	Amount.
Local	\$514,662.10
Through	1,312,448.70
State	263,982.18
Interstate	982,750.42
Total.....	\$3,073,843.40

7.—Local Train Expenses.

These expenses are divided between intrastate and interstate on the following percentages:

	Percentages.	Amount.
Intrastate	60	\$308,797.26
Interstate	40	205,864.84
	100	\$514,662.10

8.—Through Train Expenses.

These expenses are divided between intrastate and interstate on the following percentages:

	Percentages.	Amount.
Intrastate	1.00	\$13,124.49
Interstate	99.00	1,299,324.21
	100.00	\$1,312,448.70

9.—Recapitulation—Operating Expenses.

	Intrastate	Interstate.	Total.
Local train	\$308,797.26	\$205,864.84	\$514,662.10
Through train.....	13,124.49	1,299,324.21	1,512,448.70
Direct charges.....	263,982.18	982,750.42	1,246,732.60
Total	\$585,903.93	\$2,487,939.47	\$3,073,845.40

6072

10.—Taxes and Rentals.

The taxes and rentals divided on a straight revenue basis, are as follows:

	Per cent.	Taxes.	Rentals.
Intrastate	13.41	\$21,851.02	\$2,156.94
Interstate	86.59	141,094.67	13,927.62
Total.....	100.00	\$162,945.69	\$16,084.56

11.—Hire of Equipment.

This amount is divided between intrastate and interstate traffic on the revenue basis, with 30% added to cover the additional cost of the state traffic, the result is as follows:

Intrastate—				
Revenue.	Percentage	Percentage.		Amount.
\$656,717.58	13.41 x 1.3—	17.43	16.76	\$30,032.49
Interstate—				
Revenue.	Percentage	Percentage.		Amount.
\$4,239,555.33	86.59	86.59	83.24	\$149,158.97
Total—				
\$4,896,272.91	100.00	104.02	100.00	\$179,191.46

6073

12.—Recapitulation—Freight.

	Intrastate.	Interstate.	Total.
Gross revenue	\$656,717.58	\$4,239,555.33	\$4,896,272.91
Operating Expenses,			
Par. No. 9.....	\$585,903.93	\$2,487,939.47	\$3,073,843.40
Taxes,			
Par. No. 10.....	21,851.02	141,094.67	162,945.69
Rentals,			
Par. No. 10.....	2,156.94	13,927.62	16,084.56
Hire of Equipment,			
Par. No. 11.....	30,032.49	149,158.97	179,191.46
Total Expenses...	\$639,944.38	\$2,792,120.73	\$3,432,065.11
Net Earnings	16,773.20	1,447,434.60	1,464,207.80

The bases on which the foregoing figures were compiled were prescribed by the Court.

The results obtained are correct on the bases indicated.

F. P. JOHNSON,
For the Railroads.

T. A. HAMILTON,
For the State.

6074 *State of Arkansas—Rate Matter.*

St. Louis, Iron Mountain & Southern Railway.

Taxes and Assessed Value of Property Divided Between the Various Classes of Business on Basis of Gross Revenue.

	Taxes.	Assessed Value of Property.
Intrastate freight	\$21,851.02	\$1,961,340.96
Interstate freight	141,094.67	12,663,744.82
Total	\$162,945.69	\$14,625,085.78
Intrastate passenger	\$35,249.16	\$3,196,925.79
Interstate passenger	23,953.33	2,171,270.43
Total	\$59,202.49	\$5,368,196.22
Total freight and passenger	\$222,148.18	\$19,993,282.00
Total intrastate business	\$57,100.18	\$5,158,266.75
Total interstate business	\$165,048.00	\$14,835,015.25

Operating expenses per ton per mile:

	(Mills.)
Intrastate	12.24
Interstate	4.06
Excess cost of intrastate over interstate	8.18
Percentage of excess cost	201.5%

6075 The bases on which the foregoing figures were compiled were prescribed by the Court.

The results obtained are correct on the bases indicated.

F. P. JOHNSON,
For the Railroads.

T. A. HAMILTON,
For the State.

6076 Endorsed: Filed May 3rd, 1911. W. P. Feild, Clerk.
167—813

6077 And on June 26, 1911, the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. McKNIGHT,
Railroad Commissioners of the State of Arkansas.

Come the parties by their respective Solicitors and file stipulation as follows:

It is here agreed and stipulated between Counsel representing all the parties in these causes, that the testimony in the two cases were taken together and that the same was heard and submitted on the combined testimony as one case, and it is further agreed that the transcript of the testimony and the opinion of the Court transmitted by the Clerk of this Court to the Supreme Court of the United States in the case of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, shall be treated and considered in all respects as the transcript and record of the testimony taken in the case of St. Louis Southwestern Railway Company vs. Robert P. Allen, et al., and that said transcript and testimony and opinion of the Court, so transmitted, shall be used, considered and treated as the record in the above cases.

MOORE, SMITH & MOORE,
Counsel for Plaintiff.

JOS. M. HILL,
Counsel for Defendants.

JACOB TREIBER, *Judge.*

6078 And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY
v.

ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F.
McKNIGHT, Railroad Commissioners of the State of Arkansas.

Now, on this day the Defendants here applying for an appeal to the Supreme Court of the United States from the final decree in this cause, the Complainant being present by its Solicitor; and the Court purposing to grant said appeal as the Defendants are entitled thereto and desiring to preserve the status quo pending the determination of said appeal in the Supreme Court of the United States,

It is accordingly ordered that the Court Tariff heretofore put in force under the orders of this Court during the pendency of this proceeding be continued in force during the pendency of this appeal.

(Signed)

JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

In this cause come all parties by their Counsel and it appearing to the Court that Henry Leigh and George L. McLean, Defendants have been invited to join in the prayer for appeal herein and have declined to do so, it is by the Court, by consent of Henry Leigh and George L. McLean, and by consent of all parties to this cause, ordered that said Henry Leigh and George L. McLean are severed from the cause and from the appeal prayed.

(Signed)

JACOB TREIBER, *Judge*.

And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas.

Now on this day come the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, and file herein their assignment of errors and present a petition for appeal to the Supreme Court of the United States from the final decree herein and also present a bond in the sum of Five Hundred Dollars, (\$500.00), conditioned as required by law, with good and approved security.

It is ordered by the Court that the petition for an appeal, assignment of errors and appeal bond be made a part of the record and that the appeal be allowed and bond approved; and it is ordered that a certified transcript of the record and all proceedings herein be transmitted to the Supreme Court of the United States, and it further being made to appear to the Judge that the Clerk of this Court will be unable, owing to the size of the record, to prepare a transcript within thirty days from the date of the signing of the Citation, it is therefore ordered that the time for filing the transcript with the Clerk of the Supreme Court of the United States, be enlarged until the second day of October, 1911.

Dated this 26th day of June, 1911.

(Signed)

JACOB TREIBER, *Judge*.

Which Assignment of Errors is as follows:

6081 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. MCKNIGHT,
Railroad Commissioners of the State of Arkansas, Defendants.

Assignment of Errors.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, Defendants in the above entitled cause and aver that in the record and proceedings herein that there has been manifest errors committed in this, to-wit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission; which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2nd. The Court erred in not dismissing the bill of Plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be enjoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the Plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said freight rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the Plaintiff and other carriers affected thereby that if on fair test of said rates, in whole
6082 or in part, they proved to be unjust, unreasonable, unremunerative or confiscatory that relief would be granted by the Commission upon proper showing of such facts.

3rd. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of freight rates sought to be enjoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be enjoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of

freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquiescence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years' period referred to by the court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate tariff.

6083 7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this cause and in joining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the passenger Rate Act of 1907 and particularly erred in injoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiffs' bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be enjoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelligent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a state were confiscatory.

9th. The Court erred in not dismissing the plaintiff's bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be enjoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiff's bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of state and interstate traffic carried respectively on the local and through freight trains; that the plaintiff instead of resorting to the best evidence to ascertain the relative cost of state and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State, when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low as, 6084 and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carriers on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31st, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of \$20,000 per year and the plaintiff only charged \$1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of \$10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis Terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith Terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the

plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22nd. The Court erred in charging the rental of the Van Buren Bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23rd. The Court erred in holding the plaintiff road was efficiently operated.

24th. The Court erred in apportioning the property of the plaintiff in the state between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the basis adopted for apportioning expense between intrastate and interstate traffic.

6085 26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis."

28th. The Court erred in finding that the intrastate freight rates were only 50% higher than the interstate rates, when the undisputed evidence showed that the revenue per ton per mile under Standard Distance Freight Tariff No. 3 produced 98% more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis-Southwestern Railway Company, 141% more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50% which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the state expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expenses presented by the State, which said basis of division was sustained by preponderance of the testimony as being the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907 was a fairly representative month of the six months period introduced in evidence by the Iron Mountain Railway Company; that October, 1908 was fairly representative month between state and interstate traffic on the St. Louis-Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32nd. The Court erred in charging to interstate business only 40% of the expense of the local trains when the evidence shows that

on the Iron Mountain it should be about 73% and on the St. Louis Southwestern about 68% of the expense of the local trains is chargeable to interstate freight business and said finding of 40% was not supported by the evidence.

33rd. The Court erred in dividing Maintenance of Way expenses on a revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between 6086 local and through trains in charging 50% extra to yard locomotives as against the local train and 75% additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the Maintenance of Equipment of freight cars in charging 25% extra to the local trains for starting and stopping and 13½% for terminal handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every thirty five miles as against five miles to the local trains: The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in Maintenance of Equipment and Transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the Maintenance of Way and all of the other expenses.

37th. The Court erred in dividing the item of Hire of Equipment on the revenue basis and erred in charging an additional 30% to local traffic when the evidence shows there is no relation between the revenue and said item of expense and there is no evidence to show that 30% or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14%, and particularly in finding that for all such alleged omissions that 8½% should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses."

41st. The Court erred in charging the State passenger traffic with

10% greater cost than the interstate passenger traffic, when the preponderance of the testimony shows the interstate traffic is the most expensive.

6087 42nd. The Court erred in holding that the St. Louis-Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43rd. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210% and on the St. Louis-Southwestern 250%, when the evidence shows that at the outside the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6% interest on the value of its property and 1.5% surplus and that a return of less than 7½% on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiffs' investment equal to the rate of interest prevailing on Railroad securities was compensatory, which rates of interest the evidence shows to have been a little less than 4½% on Railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent on the face of the record, the defendants Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiffs' Bill of Complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

JOS. M. HILL,
JAMES H. HARROD,

Solicitors for said Defendant Railroad Commission.

Dated this June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Prayer for Appeal is as follows:

6088 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Plaintiff,

VS.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT,
Railroad Commissioners of the State of Arkansas, Defendants.

Prayer for Appeal.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, Railroad Commissioners of the State of Arkansas, defendants in the above entitled cause, conceiving themselves to be aggrieved by the decision herein rendered on the 3rd day of May, 1911, wherein the Court made perpetual the temporary injunction hereinbefore issued and found, adjudged and decreed that the freight rates embraced in Standard Distance Freight Tariff No. 3, and intrastate passenger rates enacted by the Act of the General Assembly of Arkansas of 1907, were confiscatory and the keeping of the same in force was taking the property of the plaintiff without due process of law; and prays an appeal from the said final decree of the Circuit Court of the United States for the reasons specified in the Assignment of Errors, which is filed herewith, and prays that this appeal may be allowed and a transcript of the record, proceedings and papers upon which said decree was made, duly authenticated, be sent to the Supreme Court of the United States.

JOS. M. HILL,
JAMES H. HERROD,
Attorneys for Defendants.

Dated this 26th day of June, 1911.

The petition for appeal is hereby granted and the appeal allowed, this 26th day of June, 1911.

(Signed)

JACOB TRIEBER,
District Judge, Presiding in Circuit Court.

6089 Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which bond for appeal is as follows:

6090 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM F. MCKNIGHT,
Railroad Commissioners of the State of Arkansas, Defendants.

Bond for Appeal.

Know all men by these presents, That we, Robert P. Allen, George W. Bellamy, and William F. McKnight, as principals and John W. Crockett, as sureties, are held and firmly bound unto the St. Louis, Iron Mountain & Southern Railway Company in the sum of Five Hundred (\$500.00) Dollars to be paid unto the said St. Louis, Iron Mountain & Southern Railway Company, its successors and assigns; to which said payment well and truly to be made we bind ourselves, our heirs, executors and administrators, jointly and severally by these presents. This obligation is upon this condition:

Whereas, the above named Robert P. Allen, George W. Bellamy and William F. McKnight have prosecuted their appeal to the Supreme Court of the United States to reverse the decree rendered in the above entitled cause by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof; Now if the above named Robert P. Allen, George W. Bellamy, and William F. McKnight shall prosecute their said appeal to effect, and answer all costs if they shall fail to make good their plea, then this obligation to be void, otherwise to remain in full force and virtue.

Given under our hands and seals this 26th day of June, 1911.

R. P. ALLEN.
GEO. W. BELLAMY.
W. F. MCKNIGHT.
JNO. W. CROCKETT.

The above bond is hereby approved and ordered to be filed and made part of the record.

(Signed)

JACOB TRIEBER, *Judge.*

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

6091 And on the same day the following proceedings were had, to-wit:

No. 1637.

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY
vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY AND WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas.

Come the defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, by Joseph M. Hill and James H. Harrod, Esqs., their solicitors, and file herein their Citation, which is duly signed by the Judge of this Court and service of the same duly accepted by Moore, Smith and Moore, Esqs., solicitors of record for the complainant in this cause.

Which Citation is as follows:

6092 UNITED STATES OF AMERICA, ss:

The President of the United States to the St. Louis, Iron Mountain and Southern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's Office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellees to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above Citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for the St. Louis, Iron Mountain
and Southern Railway Company.*

June 26th, 1911.

6093 And on Sept. 27th, 1911, the following proceedings were had, to-wit:

ST. LOUIS, IRON MOUNTAIN AND SOUTHERN RAILWAY COMPANY
 vs.
 ROBERT P. ALLEN, GEORGE W. BELLAMY AND WILLIAM F. Mc-
 Knight, Railroad Commissioners of the State of Arkansas.

It appearing from the statement of the Clerk of this Court that it will be impossible for him to complete a transcript of the record in this cause in time to file the same with the Clerk of the Supreme Court of the United States on the second day of October, 1911,—the day to which it was made returnable by me, when the appeal was granted and the Citation signed by me—

It is therefore ordered by me that the time for filing the transcript of the record in this cause with the Clerk of the Supreme Court of the United States is hereby extended until the 12th day of October, 1911.

September 27th, 1911.

(Signed)

JACOB TRIEBER,
*U. S. District Judge for the Eastern
 District of Arkansas.*

6094 UNITED STATES OF AMERICA,
*Western Division of the
 Eastern District of Arkansas:*

I, W. P. Feild, Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, in the Eighth Circuit, hereby certify that the foregoing writings annexed to this certificate are true, correct and compared copies of the originals remaining of record in my office, and constitute a true copy of the record, assignment of errors and of all proceedings in case St. Louis, Iron Mountain & Southern Railway Company v. Robert P. Allen et al., Railroad Commissioners of the State of Arkansas.

In witness whereof, I have hereunto set my hand and the seal of said Court, this 29th day of September, in the year of our Lord, One Thousand Nine Hundred and Eleven, and of the Independence of the United States of America, the One Hundred and thirty-sixth.

[The Seal of the Circuit Court, Western Division of East.
 Dist. Ark., U. S. A.]

W. P. FEILD, *Clerk.*

Attest:

6095 UNITED STATES OF AMERICA, ss:

The President of the United States to the St. Louis, Iron Mountain & Southern Railway Company; Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washnigton

within thirty days from date of this writ, pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellee, to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above citation this day acknowledged.

MOORE, SMITH & MOORE,
*Solicitors for the St. Louis Iron
Mountain & Southern Railway Company.*

June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

6096 In the Supreme Court of the United States.

No. 813.

ROBERT P. ALLEN et al., Railroad Commissioners, Appellants,
v.

THE ST. LOUIS, IRON MOUNTAIN & SOUTHERN RAILWAY COMPANY,
Appellees.

Stipulation.

It is stipulated by counsel that the following parts of the record in the above entitled cause be not printed:

1. Standard Freight Distance Tariff No. 3, which appears as Exhibit A to complaint and found at pages 36-92 inclusive, and also found as Exhibit N-1, pages 5900-5956 inclusive. "Court Tariff," which is Exhibit A to the order modifying the injunction and is to be found at pages 490-520 inclusive. Western Classification No. 47, and its supplements, which constitute Exhibit No. 49, which is to be found at pages 5417-5678 inclusive.

It is stipulated that either party may cause twenty-five copies of any of the publications above referred to, to be filed with the printed record and treated as a part thereof.

2. The following diagrams and maps in colors, graphic charts and maps, to-wit: Exhibit 1, Map of the Missouri-Pacific System, including the St. Louis, Iron Mountain & Southern Railway, found

at pages 5235-5236. Exhibit 9, Map of St. Louis Southwestern Railway lines, found at pages 5287-5288. Exhibit 24, Map of the United States, found at pages 5333-5334. Exhibit 30, graphic chart to the testimony of McPherson, found at pages 5358-5359. Exhibits 38, 39, 40, 41, 42 and 43, which are maps illustrating the "zone rates" and found at pages 5380-5391 inclusive. C-1 found at page 5853, D-1 found at page 5855, and L-1, including nine graphic charts found at pages 5886-5896 inclusive. M-1, a graphic chart illustrating the proportion of the rates to the St. Louis, Iron Mountain & Southern Railway in Arkansas, of the first class rate to sundry Texas common points, found at pages 5897-5898. J-1, being a blue print showing the main tracks of the St. Louis, Iron Mountain & Southern Railway, within the city limits of Fort Smith, Arkansas, found at page 5881.

This stipulation is intended to cover all graphic charts, diagrams and maps in the record. Should any other diagram or map be in the record not herein enumerated, the same shall not be printed. It is further stipulated that either party may cause twenty-five copies of any of the above maps, charts, or diagrams, to be made and treated as a part of the record, and any of the same may be used in briefs by either side.

3. The following exhibits are not to be printed, to-wit: Exhibit 7, page 5272, as Exhibit 7-A takes its place. Exhibit 11, page 5292, as Exhibit 11-A or 11-Revised, takes its place. Exhibit 25, pages 5335-5349, same being an employes' time table. Exhibit 53, detailed statement of train movements, found at pages 5690-5721 inclusive. Exhibit A-1, pages 5848-5850, the same being blank form of freight conductors' wheel report. B-1, pages 5351-5352, being form of way bill. None of Exhibit I-1, being the affidavit of E. K. Voorhees, after paragraph in the middle of page 4 of said affidavit. K-1, page 5885, General Instructions on General Classification of Bridges.

4. The affidavits presented to Judge Van Devanter for preliminary injunction, shall be omitted with the right reserved to either party to hereafter publish any part of the same that may be desired by such party, and either party may use any part of said affidavits in their brief with the same effect as if it were printed, said affidavit being found at pages 133-451 of the record.

6098 5. Any part of the record omitted from being printed under this stipulation, may by either party be hereafter printed or otherwise treated as a part of the record.

6. If either party shall file any of the exhibits or use any part of the affidavits presented to Judge Van Devanter or any other matter herein referred to, in their brief in said case, they shall notify opposing counsel thereof at least twenty days prior to the date the case is set for submission.

Given under our hands this 24th day of October, A. D. 1911.

J. M. HILL,
Attorney for Appellants.

J. M. MOORE,
Attorney for Appellees.

2662 R. P. ALLEN ET AL. VS. ST. L., I. M. & SOUTHERN RY. CO.

6099 [Endorsed:] File No. 22,889. Supreme Court U. S.,
October Term, 1911. Term No. 813. Robert P. Allen et al.,
Commissioners etc., Appellants, vs. The St. Louis, Iron Mountain &
Southern Railway Company. Stipulation as to printing record.
Filed October 31, 1911.

Endorsed on cover: File No. 22,889. E. Arkansas C. C. U. S.
Term No. 813. Robert P. Allen, George W. Bellamy and William
F. McKnight, Railroad Commissioners of the State of Arkansas,
appellants, vs. The St. Louis. Iron Mountain & Southern Railway
Company. Filed October 6th, 1911. File No. 22,889.

[End of Volume III.]

(22,890.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1911.

No. 814.

ROBERT P. ALLEN, GEORGE W. BELLAMY, AND WIL-
LIAM F. McKNIGHT, RAILROAD COMMISSIONERS OF
THE STATE OF ARKANSAS, APPELLANTS,

vs.

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR
THE EASTERN DISTRICT OF ARKANSAS.

INDEX.

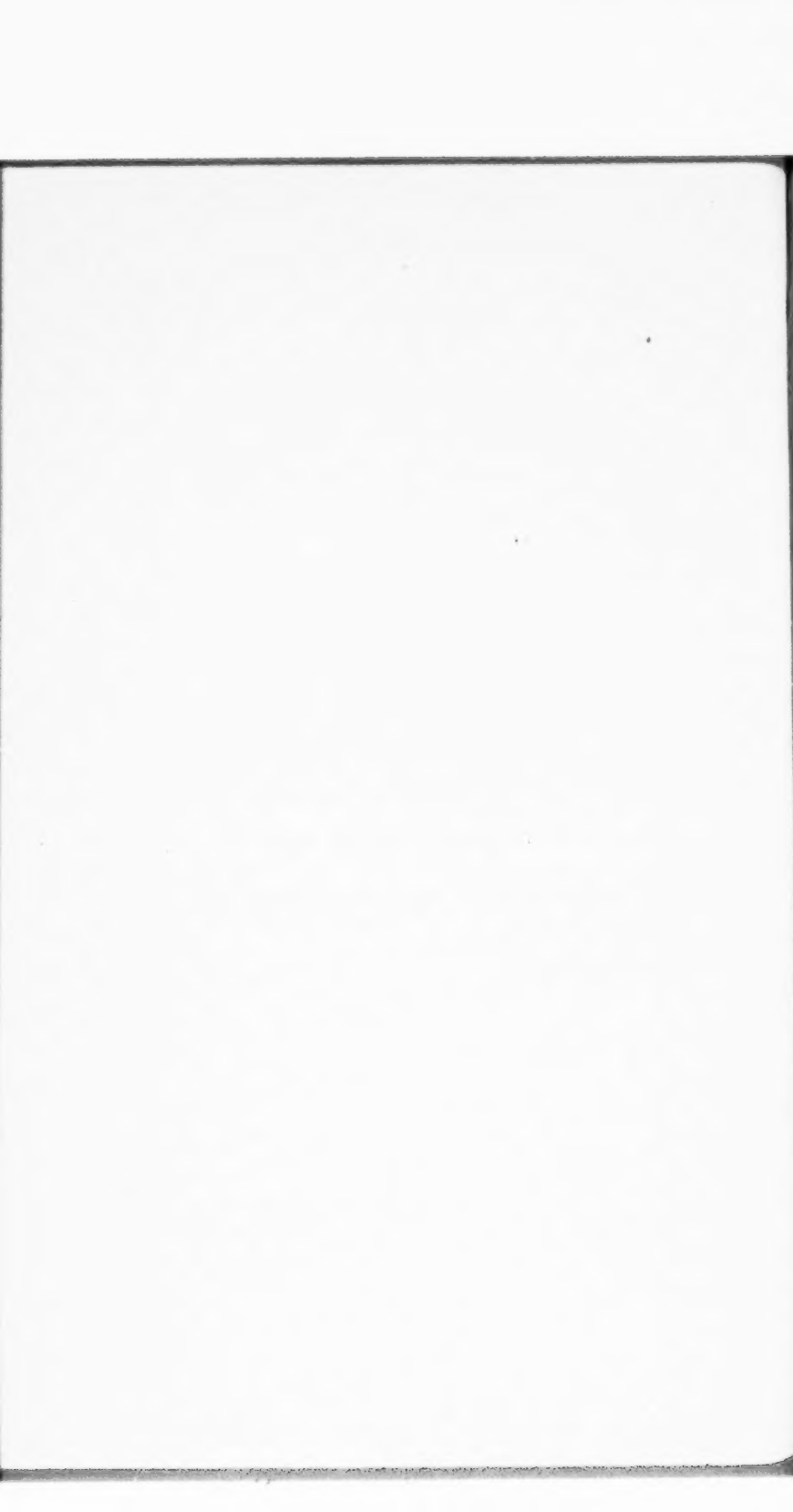
	Original.	Print
Caption to transcript	1	1
Bill of complaint	1	1
Exhibit "A"—Railroad commission tariff No. 3, June 15, 1908 (omitted in printing)	42	—
Order filing defendants' answer	100	21
Answer of defendants	101	22
Order continuing hearing of application for temporary injunction ..	129	36
Order for temporary injunction	129	36
Memorandum opinion of court on motion for temporary injunction ..	133	38
Complainant's affidavits on motion for temporary injunction	138	41
Affidavit of R. E. Kimbell	(omitted in printing) ..	139
Exhibits A to G—Statements	(" ") ..	144
Affidavit of J. D. Watson	(" ") ..	154
Edwin Stewart	(" ") ..	158
E. W. La Beaume	(" ") ..	161
J. W. Maxwell	(" ") ..	166
R. E. Kimbell	(" ") ..	171

	Original.	Print
Defendants' affidavits on motion for temporary injunction (omitted in printing)	176	—
Affidavit of G. W. Swain and exhibits. (omitted in printing) ..	177	—
F. Bache.....(" ")..	237	—
J. T. Jarrell.....(" ")..	241	—
W. R. Duley.....(" ")..	245	—
F. W. Boltz and exhibits... (" ")..	247	—
T. F. Wharton.....(" ")..	265	—
J. E. Hampton and exhibits. (" ")..	294	—
Geo. R. Brown.....(" ")..	317	—
C. F. Edrington.....(" ")..	321	—
W. W. Dickinson.....(" ")..	324	—
A. V. Alexander.....(" ")..	326	—
S. P. Scott.....(" ")..	328	—
T. B. Jacobs.....(" ")..	330	—
T. J. Gay.....(" ")..	333	—
Jas. L. Jones.....(" ")..	335	—
Fred F. La Grave.....(" ")..	337	—
A. R. Bragg.....(" ")..	341	—
J. B. Allen.....(" ")..	346	—
A. D. Allen.....(" ")..	348	—
R. T. Brook.....(" ")..	350	—
S. P. Scott.....(" ")..	353	—
J. J. Mandelbaum and exhibits (omitted in printing)	355	—
T. F. Wharton and exhibit. (omitted in printing) ..	363	—
Order filing injunction bond.....	370	41
Injunction bond	371	41
Order filing stipulation of counsel extending time for filing replication ..	373	43
Stipulation extending time to file replication.....	374	43
Order granting petition of counsel to withdraw from case.....	375	44
Petition of counsel to withdraw.....	376	44-
Order filing motion of defendants to modify injunction.....	376	45
Motion of defendants to modify injunction.....	377	45
Order modifying injunction.....	390	52
Exhibit "A"—Court tariff.....(omitted in printing) ..	391	—
Opinion of court on motion to modify injunction.....	422	53
Order filing replication	456	74
Replication to answer	456	75
Order requiring additional bond.....	457	75
Order requiring complainant to allow examination of books, records, &c.....	458	76
Order appointing P. C. Dooley special master, &c.....	460	77
Order filing additional bond	461	77
Bond	461	78
Order making allowance to master	465	79
Order as to taking testimony in rebuttal.....	466	80
Order appointing Chas. M. Rice special examiner.....	466	80
Order filing oath of Chas. M. Rice as special examiner, &c	467	80
Order filing defendants' motion to modify injunction.....	468	81
Motion of defendants to modify injunction.....	468	81
Order filing response of complainant to motion to modify injunction ..	472	84
Response of complainant to motion to modify injunction	472	84

INDEX.

III

	Original.	Print
Order continuing final hearing	475	85
Order as to final hearing, January 3, 1911.....	476	86
Order as to final hearing, January 4, 1911.....	476	86
Order as to final hearing, January 5, 1911	477	86
Order as to final hearing, January 6, 1911.....	477	86
Order making allowance to special examiner.....	478	87
Order as to final hearing, January 7, 1911.....	479	88
Order as to final hearing, January 9, 1911.....	479	88
Order substituting parties defendant	480	88
Order as to final hearing, January 16, 1911.....	481	89
Order as to final hearing, January 17, 1911.....	481	89
Order as to final hearing, January 18, 1911.....	482	89
Order as to final hearing, January 19, 1911.....	482	90
Order as to final hearing, January 20, 1911.....	483	90
Order as to final hearing and submission of cause, January 21, 1911.	483	90
Testimony of complainant and defendants (not set out).....	484	90
Final decree, May 11, 1911	485	91
Opinion of court (not set out).....	487	92
Order filing stipulation of counsel.....	488	92
Order maintaining <i>status quo</i> pending appeal	489	93
Order severing Lee and McLean as parties defendants.....	489	93
Order filing assignment of errors, prayer for appeal, and appeal bond.	490	94
Assignment of errors.....	491	94
Prayer for appeal	498	100
Appeal bond.....	500	101
Order filing citation, &c.....	502	102
Citation (copy).....	503	103
Order extending time for filing record in Supreme Court of the United States.....	503½	103
Clerk's certificate to transcript.....	504	104
Original citation	505	104
Stipulation as to printing record.....	506	106



1 In the United States Circuit Court for the Western Division
of the Eastern District of Arkansas.

In Chancery.

Be it remembered, That on the 18th day of July, A. D., 1908, come into the office of the Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, the St. Louis, Southwestern Railway Company, by Moore, Smith & Moore, Esqs., its Solicitors, and filed thereon on the Chancery side of said Court, its Bill of Complaint against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Henry Leigh and George L. McLean, which Bill of Complaint is as follows:

In the United States Circuit Court for the Western Division of the
Eastern District of Arkansas.

In Chancery. No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
v.

ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas; Henry Leigh
and George L. McLean, Defendants.

2 To the Honorable Judges of the Circuit Court of the United
States for said District:

Your orator, St. Louis, Southwestern Railway Company brings this, its Bill of Complaint against Robert P. Allen, John W. Crockett and John E. Hampton, as members of and constituting the Railroad Commission of the State of Arkansas and Henry Leigh and George L. McLean.

First. Your orator is a corporation organized under the laws of the State of Missouri, with its domicile at the City of St. Louis, in said State.

Second. The said Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, are citizens and residents of the State of Arkansas, and constitute the Railroad Commission of said State. Said John W. Crockett and John E. Hampton reside in said District, and Robert P. Allen resides at Van Buren, in Crawford County, in the Western Judicial District of said State.

The Act of the Legislature of said State under which said Commission was created, fixes and establishes the domicile of the Commission at the City of Little Rock, in the County of Pulaski, in said State and in the Western Division of the Eastern Judicial District thereof. The Defendants, Henry Leigh and George L. McLean are citizens of the State of Arkansas, and reside at the city of Little Rock, in said District.

Third. Your orator further avers that the act creating said Railroad Commission heretofore referred to, approved March 11, 1899, entitled, "An Act to provide for the regulation of Railroad, freight

3 and passenger tariffs, in this State, to prevent unjust discrimination by extortion in the rates charged for transportation of passengers and freights, and to prohibit railroad companies, corporations and lessees in this State from charging other than just and reasonable rates, and to punish the same, and to prescribe the mode of procedure and rules of evidence in relation thereto, and to appoint Commissioners and to prescribe rules for their government and define their powers and duties in relation to the same", and acts supplemental to and amendatory thereof, invest in said Railroad Commission the power and impose upon it the duty to make and put in effect reasonable and just rates of freight, express and passenger tariffs, to be observed by all persons and corporations operating any railroad or engaged in transporting persons or property in said State, and to make just and reasonable rates of freight, express and passenger traffic on connecting railroads operated by different and independent companies or corporations between stations within said State, to be observed by all persons, companies or corporations operating connecting railroads within the State, and if two or more connecting lines of railroad in said State shall fail to agree upon the division of charges arising from transportation of freights, passengers or cars over their lines, said Commission is authorized to make the division and fix the pro rata of such charges to be received by each of said connecting lines. Said Act further provided that in case any person or corporation engaged in operating a railroad in the State shall not do, or permit to be done, any act, matter or thing in said act required to be done, or shall be guilty of the violation of any of the provisions of the Act, such

4 person or corporation shall be held to pay to the person, firm or corporation thereby injured double the amount of the damage by him sustained, and all costs to be recovered by such person, firm or corporation; and in all actions between private parties and railroad companies, brought under said Act, the rates, charges, orders, rules, regulations and classifications prescribed by said Commission prior to the institution of such action shall be held to be reasonable, fair and just and shall not be controverted therein. It is also provided by said Act that if any person or corporation operating a railroad in said State or any lessee of such person or corporation shall violate any of the provisions of the Act, or aid or abet therein, or shall violate any tariff of charges as fixed by said Commission, or any rules, regarding railroads or express companies as made by said Commission, such person corporation or lessee shall be liable to a penalty of not less than \$500.00 nor more than \$3000.00 for each violation of said Act, in an action brought in the name of the State, and in the County in which such violation shall occur, and the said Commission shall institute such actions as may be necessary for the recovery of the penalties prescribed therein through the prosecuting attorney of the proper district, or through Counsel specially employed by said Commission.

And your orator avers that the effect of the aforesaid provisions

of said Act is to deny your orator and all persons and corporations operating railroads in said State of the right to a judicial investigation of the validity and reasonableness of the rates, rules, regulations and classifications prescribed by said Commission, and to deprive your orator and all others in like condition of the due process of law, contrary to the provisions of Section 1 of the Fourteenth Amendment to the Constitution of the United States.

Fourth. Your orator further alleges that on the 15th day of July, 1904, the predecessors of Defendants, the then acting Railroad Commissioners of said State, assuming to act under the authority of the aforesaid provisions of the Statutes of said State, promulgated Standard Freight Distance Tariff No. 2, prescribing freight rates and charges applicable to classes and commodities between all stations in said State, on all railroads operated therein subject to western classifications as adjusted to traffic in said State. The rates therein prescribed were continued in force, with certain amendments thereof made and promulgated by said Commission from time to time, until June 4, 1908, when said Defendants, acting in their official capacity, adopted Standard Freight Distance Tariff No. 3, applying on classes and commodities between all railroad stations in said State, subject to western classifications as adjusted to traffic therein, cancelling Standard Freight Distance Tariff No. 2 aforesaid, and ordered that the same take effect on June 15, 1908. Said tariff contains many of the rates and regulations that were contained in Standard Freight Distance Tariff No. 2, as aforesaid, and the changes and amendments made therein by said Commission since said Tariff No. 2 was promulgated, and other changes in rates on classes and commodities made in the order of said Commission adopted on June 4, 1908. A copy of said Standard Freight Distance Tariff No. 3 is herewith filed as Exhibit "A" and made a part hereof.

Fifth. Your orator avers that each and all of the charges and rates prescribed in said Tariff No. 3 aforesaid, as well as the preceding Tariff No. 2, applying on classes and commodities as aforesaid, are unreasonable, unjust, oppressive, discriminative, confiscatory and void, both in respect to said order as a whole and in respect to each and every rate, charge, tariff, schedule, classification, rule and regulation separately:

(1) The railroad equipment, property and franchises owned and used by your orator in operating its said road in said State represents an investment of \$16,023,090.00, according to the last assessment of said property for taxation by the State of Arkansas through the State Board of Railroad Assessors, which assessment is now in force. Orator has exercised as great a degree of economy in the use and operation of said property as was compatible with the interest of the public with safe and efficient service to the public, only employing such officers, agents and employees, and expending such amounts in the maintenance and repair of its road bed, tracks and stations and new equipment of engines, cars and other appliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to the due and proper oper-

ation of its trains, and to the maintenance of said property with due regard to its preservation and the safety of the public.

7 That no unreasonable salaries or wages have been, or are now being, paid to any of its officers or employees. But notwithstanding that orator has practiced all reasonable and proper economy in operation and maintenance as aforesaid, it has been unable and will be unable to operate said road at a profit at the rates prescribed in said tariff. On the contrary, said rates do not and will not yield a just and reasonable return upon the value of orator's property used in said service, either in respect to the money invested in said property or the service rendered. And in that behalf your orator alleges that the total earnings from its interstate business in the transportation of freights in the State of Arkansas, during the year ending June 30th, 1908, did not exceed the sum of \$351,735.60; that the expense of operation solely incident to said business, and the fixed charges solely incident and chargeable to intrastate transportation of freights was \$346,245.47. That the total earnings of said property from the transportation of freight, wholly within the State of Arkansas is not and will not be sufficient under the rates on classes and commodities prescribed as aforesaid as a whole, after paying operating expenses, charges for maintenance, taxes and other necessary fixed charges appertaining to said business, to yield any return by way of compensation for the service rendered by your orator, and the effect of such rates is and will be to prevent your orator from receiving any return or profit for the service rendered by it to the public, and will deprive orator of its

8 property without due process of law and will deny to it the equal protection of the laws.

(2) Your orator represents that among the principal commodities transported on the lines of railroad in the State of Arkansas are coal and coal slack; that the principal, in fact, the only, coal fields now or heretofore operated in said State, are situated in the Counties of Johnson, Franklin, Sebastian and Logan; that the coal mined in said counties is shipped from the following stations: That in Johnson County from Spadra, Coal Hill, Clarksville, Cabin Creek; That in Franklin County from Denning; that in Sebastian County from Jenny Lind, Huntington, Burma, Montreal, Hackett, Jensen, Bonanza, Dallas, Dennison, Excelsior, Greenwood, Gunther, Harp, Hartford, Hoffman, Hoyer, Fidelity, Midland, Patterson and Prairie Creek; and that in Logan County from Knoxville, Piney and Paris.

That under the commodity rates prescribed in the aforesaid tariff the rate on coal for a distance of 110 to 120 miles is \$1.00 per ton; 120 to 140 miles, \$1.05 per ton; 140 to 160 miles, \$1.10 per ton; 160 to 170 miles, \$1.25 per ton; 170 to 180 miles \$1.30 per ton; 180 to 190 miles, \$1.30 per ton; 190 to 200 miles, \$1.40 per ton; 200 to 210 miles, \$1.45 per ton; 210 to 220 miles, \$1.50 per ton. That the principal market in said State for coal and coal slack is the city of Little Rock and points north, south and east of said city; that the City of Little Rock is 114 miles from Coal Hill, from 141 to 156 miles from the aforesaid coal stations situated in Sebastian County

9 and 165 miles from the station of Paris, in Logan County, by the lines of road connecting said points with said City, and over which the product of the said coal mines is shipped to said markets. All coal shipped to said markets and each of them is routed through the city of Little Rock, and the same difference in the length of haul from the stations at which said shipments of coal originate exists as to all of them. That the coal shipped to points north, south and east of said city is there transferred to different lines of road, and in most cases is subject to the joint through rates prescribed by said Commission. That the coal mines situated in Sebastian County are on the line of the St. Louis & San Francisco Railroad and the Midland Valley Railroad, and the St. Louis, Iron Mountain & Southern Railroad. All of said lines of road connect with your orator's road at the City of Little Rock, either directly, or through intermediate connecting lines.

That under the regulations adopted by said Commission in regard to rates on commodities Coal Hill rates apply from all points in Logan, Franklin and Sebastian Counties, and all points in Johnson County west of Coal Hill to the City of Little Rock and points north, south and east of said City, thus fixing the maximum rate from any of said points to the City of Little Rock at \$1.00 per ton. That said rate does not pay the cost, including the terminal service, of handling said product, and is unreasonable, unjust and confiscatory. That all the coal shipped from Mansfield, Hartford and Paris has to be transported over connecting lines of railroad, and the rate prescribed as aforesaid applies whether said commodities are shipped

10 over one or more than one railroad, under the regulations adopted by the said Commission as aforesaid in connection with joint rates on commodities established by said Board. That the distance by rail from the aforesaid stations to Little Rock is from 143 to 165 miles; that the rate from said stations to the city of Little Rock, as prescribed by said Commission on the several connecting roads is \$1.60 per ton, and yet your orator and its connecting lines are compelled under the aforesaid regulations to transport said products, from said stations to all stations on your orator's road, on a basis of \$1.00 per ton, and it avers that the aforesaid rates are not only confiscatory, but they are discriminative, and do not afford to the said lines, or either of them, a fair, reasonable, or just compensation for the service rendered in transporting said products.

(3) Your orator alleges that a large proportion of the entire tonnage transported over its lines of railroad originating in Arkansas, consists of timber and timber products; that at least 90 per cent of said tonnage is shipped from points in said State to points in other States and is interstate commerce. Under the universal practice prevailing among shippers and railroad companies in said State, where the timber is situated at a distance from the mills, it is transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and takes the prevailing rate under interstate shipments from the point at which the shipment of the rough material originated in said State to the

11 destination of the mill product in other States; that said milling privilege in transit does not affect the interstate character of said shipments, but is an incident only in the interstate movement. The practice of all the railroads in the State engaged in the transportation of that commodity was, prior to April 1, 1907, to collect from the shipper the local rate from the place at which the shipment originated to the milling or concentration point. After the product had been milled and shipped to market the regular interstate rate from the point of origin to the point of destination was applied, allowing the shipper the difference between the local and through rate between the stations at which the rough material was received and the point of concentration. All shipments of rough material and the several products thereof, viz., lumber, staves, bolts, spokes, handles, hooks, hubs, boat oars, furniture, etc. took that course. On April 1, 1907, said Commission recognizing the aforesaid practice, and for the purpose of regulating the same, made an order that the following rates should apply on the shipment of rough lumber, staves, fitches, bolts and logs, in car loads, between all points in Arkansas, viz: For a distance of from—

1 to 50 miles, inclusive, 2 cents per cwt.

51 to 100 miles, inclusive, $2\frac{1}{2}$ cents per cwt.

101 to 150 miles, inclusive, $3\frac{1}{2}$ cents per cwt.

151 to 250 miles, inclusive, 5 cents per cwt.

250 miles and over, 8 cents per cwt.

Said rates are made upon condition expressed in said order that the manufactured product shall be reshipped over the same line bringing in the rough material.

12 Said order further provided that carriers would be allowed to require consignee-desiring to avail themselves of the benefit of said rate to enter into contracts with reference to the reshipment of the finished product under the rules prescribed by said Commission, and your orator avers that said order of the Commission was made with the direct intent and purpose of establishing, regulating and fixing interstate rates on such material and commodities, by the device of establishing rates applicable between the point of origin of the rough material and the point of concentration for milling purposes, and intending and requiring that such rates should be applied to all shipments of such material from the point of origin in said State to the point of destination in other States; and orator avers that such order is a direct interference with interstate commerce over which said Board has no jurisdiction, and is, for that reason, unlawful and void. Orator further avers that the aforesaid rates are unreasonable and oppressive, because they do not afford to carriers any compensation whatever for the service rendered in connection with the transportation of said commodities and are therefore confiscatory, and take the property of orator and other carriers in said State, without compensation, and are in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States, prohibiting the taking of property without due process of law and

without compensation, and guaranteeing to all persons the equal protection of the laws.

(4) Your orator alleges that cotton is the principal agricultural product of the State of Arkansas; that practically the entire crop raised in the State each year is shipped to markets in other States and foreign markets. That on account of economy in transporting said product it has come to be a universal practice to compress the same in small bales or packages, whereby a large number of bales can be loaded on a car; that it is impracticable to establish and operate plants and machinery for the purpose of compressing cotton, except at a few central points in the State, and for that reason all cotton destined to markets outside of said State are shipped in the original bales or packages as prepared at the local ginneries throughout the country and concentrated at points on the lines of railroad, where compresses are operated for compression. Under the universal practice and the rulings of the Interstate Commerce Commission of the United States, all cotton raised in said State and shipped to points in other States and foreign markets is subjected to a process of compression for the purpose aforesaid, the shipper being required in the first instance to pay the local rate to the point of concentration; but upon reshipment to points of destination the through, or interstate rate, is applied to the entire shipment from the point of origin (that is to say, the station from which the same was consigned to the point of concentration), to the point of ultimate destination, the difference in the local rate between the point of origin and the place of concentration being allowed the shipper and adjusted in the charge applied to the interstate shipment. Said privilege of compression in transit does

14 not affect the interstate character of said shipment, but is an incident only in the interstate movement. On September 16, 1907, said Commission made and promulgated an order, prescribing the following rates on uncompressed cotton in bales between all stations in said State on the following lines of railroad, viz:—Chicago, Rock Island and Pacific Railway and branches, Kansas City Southern Railway, Louisiana & Arkansas Railroad, St. Louis Southwestern Railway and branches, St. Louis, Iron Mountain & Southern Railway, Leased, Independent and Operated Lines—For a distance of thirty miles and under, 10 cents per cwt.

For a distance of forty-five miles and over thirty miles, 11 cents per cwt.

For a distance of fifty miles and over forty-five miles, 12 cents per cwt.

For a distance of seventy-five miles and over fifty miles, 14 cents per cwt.

For a distance of one hundred miles and over seventy-five miles, 15 cents per cwt.

For a distance of one hundred and twenty-five miles and over one hundred miles, 20 cents per cwt.

For a distance of one hundred and fifty miles and over one hundred and twenty-five miles, 30 cents per cwt.

For a distance of over one hundred and fifty miles, 40 cents per cwt.

Said order provides further that—

"In so far as the jurisdiction of the Commission is involved, the railroad companies operating in this State may continue in effect the present rates, rules and regulations in respect to the concentration of cotton at compress points, or the railroad companies may make such reasonable modifications of same as they may desire, provided, that before any such change or modification desired to be made by any railroad company shall become operative, the same shall be first submitted to and approved by the Commission.

"All rates, rules and regulations in effect in this respect with reference to the shipment of cotton, which is not expressly disturbed or affected by the provisions of this order, shall remain in effect to the same extent as if this order had not been issued." Referring therein to the practice hereinbefore alleged in regard to the concentration and shipment of cotton from said State into other States and to markets in foreign countries.

Orator avers that the movement of cotton as aforesaid, and each and all of the parts thereof, as hereinbefore alleged, have been treated and recognized by the public and by the Interstate Commerce Commission of the United States as interstate commerce, and the direct intent and effect of the aforesaid rules, rates and orders made and promulgated by the Railroad Commission of the State of Arkansas, in regard to the transportation of cotton is a direct and intentional interference with interstate commerce, both as regards the rates and regulations in reference to the transportation thereof. Wherefore it avers that the same is unlawful and void. And orator further avers that said rates are so unreasonable, unjust and oppressive as not to afford any profit to the carriers handling the same, and are confiscatory and in violation of the aforesaid provision of the Fourteenth Amendment to the Constitution of the United States.

(5) Your orator alleges that its main line of Railroad extends from St. Louis, in the State of Missouri, to Texarkana, in the State of Arkansas, and is 564 miles in length, that it likewise owns and operates the following branch lines, viz: Stuttgart Branch from Stuttgart to Gillett, 35.1 miles; Little Rock Branch, Altheimer to Little Rock, 44.8 miles. That all of said lines, owned and controlled by your orator as aforesaid are operated as a unit; that a very large amount of interstate traffic passes over them and each of them between the States into and through which the same are operated and into and through other States with which said lines form connections at their several termini. That the local rates in the several states into and through which said lines pass enter to a very large extent, and have a controlling influence on the through rates charged on interstate shipments, which are made on a combination, or percentage of the combination, of the intermediate local rates, by adding the local rates within the several states into and through which such shipments pass. Said through rates are thus constructed, and from necessity and under the rulings of the Interstate Commerce Commission of the United States, and the orders of said Commission

of the State of Arkansas, affects and controls rates on interstate shipments passing from, into or through said State, by its effect in reducing interstate rates to the sum of the combination or percentage of the combination of the local rates on such shipments. Orator avers that many of the rates established by said Defendants were made with reference to the local rates in adjoining States, and for the purpose of compelling the reduction of through rates on the basis of local rates in the States into and through which shipments pass.

And so your orator avers that many of the rates established by the said Railroad Commission of the State of Arkansas, as aforesaid, were made with the intention and for the purpose, and each and all of said rates so established as aforesaid, will have the effect of regulating and fixing interstate rates on all such classes and commodities, and is therefore an attempt to regulate interstate rates and affect interstate commerce, and is in violation of the Constitution and laws of the United States, and an invasion by the Defendants of the powers, rights and duties vested exclusively by the Act of Congress, in officials of the United States.

(6) Your orator further alleges that it is provided by an Act of the Legislature of said State, approved April 8th, 1903, that all persons, companies or corporations operating any railroad in said State that forms part of a continuous line of railway communication, between points in the State, shall issue through passenger tickets and check baggage through, to and from all points on such continuous line of communication at through rates and fares; that all freight and traffic carried wholly within this State to and from stations on lines of continuous carriage shall be way-billed through at through rates and tolls from points of departure to the point of arrival, without being rebilled at junction points; and in the case of carload freights the forwarding carrier shall receive and forward the same in the car or cars in which the freight is tendered and without breaking bulk of packages; that in all cases where there is by physical connection of railroads, a continuous line of railway communication between stations within this State, whether such stations be on railroads operated by one and the same company or corporation, or on railroads operated by different and independent companies or corporations, it shall be the duty of said Commission to make just and reasonable rates of freight, express, and passenger traffic to and from such stations, to be observed by all persons, companies or corporations operating any railroad or engaged in transporting persons or property as express or freight in this State. That if any two or more connecting lines of railroad shall fail to agree upon a fair and just division of the charges arising from the transportation of freights, passengers or cars over such lines, the Commission shall make the division and shall fix the pro rata part of such charges to be received by each of said connecting lines.

That said Commission, assuming to act under and by virtue of the authority of the provisions of the aforesaid statute, by the order adopted by it on June 4, 1908, as aforesaid, attempted to make and put in force through joint rates for the transportation of shipments

of merchandise by classes and commodities over two or more lines of railroad, which are not under the same management and control, by adding to the rates prescribed in the schedules prescribed by said Commission for single line or continuous mileage, certain differentials, and by fixing a maximum of through joint rates on classes and commodities to be charged by all railroads on shipments between stations in this State. The differential prescribed on merchandise by classes is as follows:

Less than car loads—

First Class	10c
Second Class	8c
Third Class	7c
Fourth Class	6c
Fifth Class	5c

Car load—

Class A.....	5c
Classes B and C.....	4c
Classes D and E.....	3c

Provided, that when the sum of the rates prescribed for local application is less than the through joint rate ascertained as aforesaid, such sum of rates shall be used as a joint rate, and further, that the through joint rate shall not, in any case, exceed the following figures:

Less than car load—

First Class	82c
Second Class	79c
Third Class	65c
Fourth Class	74c
Fifth Class	37c

Car loads—

20 Class A	41c
Class B	31c
Class C	27c
Class D	23c
Class E	21c

The joint rates on commodities on two lines of Railroad are determined in the same manner, with the proviso that the total through joint rate shall not exceed that charged for a single line haul on such commodities.

The through joint rates for the transportation of shipments of merchandise by classes over three or more lines of railroad are determined by adding the charges on the several railroads, or parts of railroads, as prescribed, for the respective distances such class merchandise is carried over each line, and deducting from the sum ten per cent, provided that the through joint rate shall in no case exceed the following:

Less than car load—

First Class	92c
Second Class	84c
Third Class	72c
Fourth Class	53c
Fifth Class	42c

Car Loads—

Class A	46c
Class B	35c
Class C	31c
Class D	26c
Class E	24c

21 The joint through rates for the transportation of commodities over three or more lines of Railroad, are determined in the same manner as in the case of merchandise by classes provided that said rates shall not exceed the commodity rates for three hundred miles plus the differential applied to through commodity rates for two lines of railroad, and shall not be less than the rates applying for seventy-five miles. Orator here refers to sheets, 19, 20 and 21 of Exhibit "A" hereto, for a full statement in detail of the through joint rates attempted to be established by and through the aforesaid order of said Commissioners. Your orator avers that neither the State of Arkansas nor the Defendants, acting as the State Railroad Commission of said State, has the power or authority to make contracts for joint through rates, or joint through routing, or to compel separate and independent lines of railroad to enter into contracts for joint rating or routing of freight over separate lines of railroad, or to accomplish the same result by prescribing arbitrary rules for the creation and division of through joint rates on separate lines of railroad; or to make and enforce joint rates between your orator and other connecting lines of railway in said State; that the effect of the aforesaid order is to create and establish traffic arrangements between separate and independent lines of railroad in relation to the transportation of merchandise between points on lines of each of said roads, and to compel said railway companies to enter into contract relations with each other without their consent, although the same may

22 be hurtful to their interests. Orator further alleges that the joint through rates prescribed in said order are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freights; that said order is unjust, oppressive, confiscatory, and its effect is to deprive your orator and all other railroad companies operating in said State of their property without due process of law, and will deprive them of the equal protection of the laws in violation of the provision of the Fourteenth Amendment of the Constitution of the United States.

Sixth. Your orator further represents that by an Act of the legislature of the State of Arkansas, approved the 9th day of February, 1907, entitled, "An Act To Amend Section 6611, of Kirby's Digest of the Statutes of the State of Arkansas, by Fixing Passenger Rates

in this State and For Other Purposes," it is provided that the maximum sum which any corporation or person operating a line of railroad in this State shall be authorized to charge for carrying each first class passenger over such line within the State shall be fixed at five cents per mile on lines of railroad fifteen miles or less in length, three cents per mile on lines of railroad over fifteen and less than eighty five miles in length, and two cents per mile on all lines of railroad, over eighty-five miles in length; and for carrying children between the ages of five and twelve years, in charge of adults, one half the

23 rates above named, and for such children as are under the age of five years, that no charge whatever shall be made beyond what is collected from the adults having them in charge. It was further provided that said Act should take effect and be in force sixty days after its passage. Said Act was passed for the purpose of amending and is an amendment to Section 6611 of Kirby's Digest of the Statutes of said State.

Section 6620 of said Digest provides that if any person or corporation mentioned in section 6611 aforesaid shall charge, demand, take or receive from any person or corporation any greater compensation for transportation of passengers than is therein prescribed, such person or corporation shall forfeit and pay for every such offense a sum not less than \$50.00 nor more than \$300.00 and costs of suit, including a reasonable attorney's fee to be taxed by the Court, to be recovered in a suit at law in any Court of competent jurisdiction. That any officer, agent, or employee of any such person or corporation, who shall knowingly and willfully violate the provision of the Statute, by charging a greater rate than is therein prescribed shall be liable to the same penalty to be recovered in the same manner.

That on May 15, 1907, the Defendants, acting as Railroad Commissioners for said State, made and promulgated an order providing that—

"The maximum sum which any corporation, person or association of persons operating a line of railroad in this State shall be authorized to charge and collect for carrying each passenger over such line within the State is fixed at the following rates:

24 "On lines of Railroad fifteen miles or less in length, 5c. per mile.

"On lines of railroad fifteen miles in length and not over eighty-five miles in length 3c. per mile.

"On lines over eighty-five miles in length, 2c. per mile.

"And for carrying children in charge of an adult there may be charged and collected one half the above named rate for such of said children as may be under the age of twelve years and over the age of five years, and for such of said children as may be under the age of five years, no charge whatever shall be made beyond what is collected for the adults who shall have them in charge."

Prior to the passage of the aforesaid Statute and promulgation of the aforesaid order by the Defendants, your orator and all other railroads in said State operating lines over seventy-five miles in length, charged three cents per mile for the transportation of adults between all stations on its and their lines of railroad. That notwithstanding it at all times operated its trains in said State with as great a degree

of economy as was compatible with the comfort of passengers, safe and efficient service to the public and the maintenance and preservation of its property, as hereinbefore alleged, the gross receipts from carrying passengers within the limits of said State at the rate of three cents a mile aforesaid, after deducting therefrom the cost of conducting such business in the State, including operating expenses and maintenance and fixed charges properly appertaining

25 to said business, were not sufficient to leave any adequate and reasonable profit or return upon the value of the property used in and about said business or for the service rendered the public.

Orator alleges that the rates fixed and established by the late Act of the Legislature and by the order of said Commission as now in force in said State has caused a large reduction in the rates theretofore prevailing on the transportation of passengers and excess baggage. That it felt constrained, on account of the large number of actions, for double damages to which it would become subject under the provisions of the Statutes of said State and the provisions of said Statutes making the rates, charges, orders, rules, regulations and classifications, prescribed by said Commission in actions between private parties and railroad companies conclusive, and denying such companies the right to question or investigate the fairness, reasonableness and legality of such rates, charges, orders, rules, regulations and classifications in such action as well as of the harsh and severe penalties prescribed for the failure and refusal to put in force tariffs of charges and rules, regulating railroads prescribed and put in force by said Commissioners, as well as by the penalties specially prescribed for the failure to comply with the provisions of the Act of the Legislature, reducing passenger rates as aforesaid, to reduce its rates, in compliance with the provisions of said Statute and the aforesaid order; that said rates have been in force on its lines of

26 railway in said State since the aforesaid statute and order took effect, and orator avers that all its earnings from intrastate transportation of freight and passengers in said State during said period have not been sufficient to pay operating expenses and the cost of maintenance and fixed charges properly chargeable to said business, and it has been compelled to operate its passenger and freight trains at a loss of revenue. Your orator alleges that the total earnings from the transportation of passengers between stations in the State of Arkansas during the year ending June 30, 1908, did not exceed \$440,355.13; that the total expense of operation solely incident to said business, including all fixed charges, except interest charges, was \$469,823.10 for the same time.

Seventh. Your orator alleges that the State of Arkansas contains no large cities and very few commercial centers; that a great deal of the jobbing and wholesale trade of said State is interstate business; that the population is sparse and very small as compared with the mileage of railroads operated in said State; that both freight and passenger business of your orator and of all other railroads operated in said State is light; that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in the aforesaid orders of the Railroad Commission of said State are unreasonably

low, and neither your orator, nor, it is informed, any other line of railroad operating in said State is able to earn a reasonable compensation for the services rendered either in the carriage of passengers or freight within said State, after paying the necessary

27 expenses of operating and other expenses necessary and incident to the intrastate business of said State. That while the rates of passenger fare, as well as freight rates have been reduced by the Acts of the Legislature of said State, as well as by the order promulgated by said Commission, the expense of operating and maintaining the railroads, and properties used in connection therewith, in said State, has been materially increased by reason of the legislation of said State, and the rules, regulations and orders of said Commission. That during the session of the Legislature of 1907, at which the Statute requiring the reduction of one third in the passenger rates was enacted, many statutes imposing burdens and increasing the expense of operating and maintaining railroads were passed. Among such enactments was a law requiring railroads exceeding fifty miles in length to employ three brakemen on freight trains consisting of more than twenty five cars, whereas previous to that time two brakemen had been employed and were sufficient for the efficient management of freight trains; requiring railroads to drain roadbeds, to construct foot walks to passenger depots, to equip all locomotives with electric headlights, limiting the hours of service of employes, making railroads liable for injuries caused by fellow-servants and absolutely liable for damages caused by fire, and numerous special acts affecting and increasing the expense of operating passenger trains and maintaining depots and station houses. That many of the requirements contained in said Act were not necessary to the safe and efficient operation of trains. That a

28 large amount of expense has been incurred and will be necessary in making and maintaining the changes provided for in said legislation, without any increase in the revenues by reason thereof. The result of all of which legislation has been greatly to increase the cost of conducting the business of your orator and other persons and corporations engaged in like business in said State. And orator alleges that all the earnings of all its lines of railroad within said State on the business transacted by it in the State are not sufficient to pay the expense of operating properly applicable to said business and afford any adequate or reasonable returns on the money invested in said property.

Eighth. Your orator alleges that the lines of road operated by it were constructed under grants of the State of Arkansas, which confer the right to collect reasonable rates of toll and fare for the transportation of freight and passengers over and upon said railroad, and such as would enable your orator to operate said road profitably. That there grew out of said grants and was necessarily implied therefrom an agreement or contract on the part of the State that your orator should have the right to impose reasonable charges and tolls for the transportation of persons and property

That the General Assembly of the State of Arkansas, by an Act approved July 23, 1868, passed a general law for the creation and

organization of railroad corporations, for the purpose of owning, maintaining and operating railroads in said State, under which Act your orator was incorporated. That said Act among other things provided that—

29 “The Legislature may, when any such railroad (meaning any railroad organized under the provisions of said Act) shall be open for use from time to time, alter or reduce rates of toll, fare, freights, or other profits upon such road; but the same shall not, without the consent of the corporation be so reduced as to produce with said profits less than 15 per cent per annum on the capital actually paid in, nor unless on an examination of the amounts received and expended to be made by the Secretary of State, he shall ascertain that the net income derived by the Company from all sources for the year then last passed shall have exceeded an annual income of 15 per cent upon the capital of the corporation actually paid in.”

Said provision of the Statute is now in force, never having been repealed, and is contained in Kirby's Digest of the Statutes of Arkansas, as Section 6590.

Said lines were constructed by your orator and those from whom it acquired and under whom it holds the same, on the faith that the State would, in good faith, carry out and perform its aforesaid agreement in regard to rates to be charged by railroads in said State as aforesaid, as well as with reference to the annual profits, and that it would not, by direct legislation, or through any agency created by it, impose on the persons and corporations owning and operating said railroads, such rules, regulations and tariffs as would deprive

30 them of the right to establish and charge such rates as should be reasonable, just and fair and as will enable it to earn a profit of fifteen per centum per annum on the capital actually paid in. Your orator alleges that while it has voluntarily reduced its rates from time to time as the development of the business upon its lines and the condition of the country would warrant, it has never consented to such reduction of its rates by the State as would reduce its profits annually below the rates provided for in the aforesaid Statute.

Your orator avers that, disregarding its contract and obligation in the premises, the State of Arkansas, by and through the aforesaid Act of the Legislature of said State approved the 9th day of February, 1907, aforesaid, and the orders of the State Railroad Commission, established rates of passenger fare and freight charges which do not enable your orator to earn fifteen per centum per annum on the capital actually paid in, or in fact sufficient to pay the expense of operating, maintaining and keeping down the fixed charges pertaining to the business of carrying passengers and freight in said State, or on its entire lines of railroad and business conducted therein. That the action of said State in fixing said unreasonable and confiscatory rates, and in depriving your orator by the aforesaid legislation and Acts and orders of said Railroad Commission, of the power to earn a profit of not less than fifteen per cent per annum on its capital actually paid in, impairs the obligation of the

contract of the State contained in said Statute, as hereinbefore set out, in violation of the provisions of Section 10, of Article 1
31 of the Constitution of the United States, prohibiting the State from passing any law impairing the obligation of its contract.

Ninth. Your orator represents that by the provisions of the aforesaid Acts of the Legislature of the State of Arkansas, any railroad failing or refusing to put in force any tariff ordered by said Board of Railroad Commissioners, or any of the rules and regulations prescribed by said Commission, is not only liable to a penalty of not less than \$500.00 nor more than \$3000.00 for each violation, but is also made liable to pay to any person, firm or corporation injured by such violation double the amount of damages sustained by him and all costs, and as a cumulative penalty, any railroad that shall charge, take or receive any greater compensation for the transportation of passengers than the rate prescribed by law shall forfeit and pay for every such offense not less than fifty dollars not more than three hundred dollars and the cost of suit, including a reasonable attorney's fee, to be taxed by the Court; and it is further provided that any officer, agent or employee of any railroad, who shall knowingly and willfully demand, take or receive a greater compensation for the transportation of passengers than the amount allowed by law, shall likewise forfeit not less than fifty dollars nor more than three hundred dollars and cost of suit, including attorney's fee, to be taxed by the Court, for each offense. Orator alleges that the penalties and liability imposed by the aforesaid provision of the Statutes are so severe as to constrain persons and corporations subject to the provisions of said legislation to submit thereto, however illegal, rather than take the risk of incurring such enormous liability and penalties, the effect of
32 which would be to utterly bankrupt and destroy them, and cause the persons whose money is invested in such property to forfeit their entire investment. That no prudent officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed on him personally by said Statute. Wherefore, your orator and all other persons and corporations operating railroads in said State and subject to the provisions of the aforesaid Statutes, have been coerced into compliance with the aforesaid illegal and confiscatory legislation by said State, and orders made and promulgated by said Railroad Commission, rather than to subject said property, and the officers, agents and employees employed in and about the operation of the same, to the great multitude of suits and prosecutions that would have followed the failure or refusal to put said rates in force. But your orator avers that said rates, both as to freight and passengers, can not be continued in effect without irreparable loss to it, and serious and irreparable injury to and destruction of the property, rights and interest of your orator and of all persons interested in said property as creditors or stockholders of your orator.

Tenth. Your orator further alleges that the penalties prescribed by the Statutes of the State of Arkansas for a violation of the Rules

and Regulations of said Commission, and the rates of freight and passenger fare, put in force by said Commission are unreasonable and excessive in amount. That the penalties that would

33 accrue against your orator each day for the violation of the rates prescribed by the aforesaid orders of said Commission for the carriage of freight between stations in said State, on the basis of the minimum fine prescribed by law, would amount to \$200,500.00 and for the violation of the rates prescribed as aforesaid for carrying passengers within said State on the basis of the minimum fine imposed by the aforesaid Statutes would amount to \$118,000.00. That said penalties are immoderate and out of proportion of the acts designed to be punished; they are absurd and unreasonable in that they apply without discrimination to a great variety of acts and omissions that are wholly unlike and dissimilar, both in regard to the nature of the Act done or omitted and its effect upon the rights of the public and of individuals, and said provisions are manifestly designed to operate as a menace to compel unquestioning obedience on the part of railroad companies, their officers, agents and employees to all orders, rules and regulations promulgated by said Commission without regard to their lawfulness, by exposing said companies to such ruinous fines and penalties, and the officers, agents and employees of said companies likewise to such severe and ruinous penalties as to deter the said companies and the officers, agents and employees thereof, from resisting on any ground, however harsh or unreasonable, the action of said Commission may be or seem, and by deterring all said parties from resorting to the Courts for the purpose of contesting the legality of such rules, regulations and rates, for fear of being harassed and oppressed by

a multitude of prosecutions and suits, during the pendency
34 of such proceeding, and of the consequences to them in case they should fail to maintain the ground of contest, notwithstanding that the same may have been instituted in the utmost good faith and for the purpose of testing and judicially determining the validity and legality of such order, rule or regulation. Wherefore, your orator avers that said provisions are discriminative and deprive your orator and all others in like condition of their property without due process of law and of the equal protection of the law, and are, therefore, in violation of Section 1 of the Fourteenth Amendment of the Constitution of the United States.

Said provisions are likewise in violation of Section 9 of Article 2 of the Constitution of the State of Arkansas, which provides that no person shall be subject to excessive fines, and that no unusual punishment shall be inflicted.

Eleventh. Your orator further alleges that the Defendants are shippers on your orator's lines of railroad and make frequent shipments of freight between stations situated wholly within said State. Said defendants are also in the habit of travelling on your orator's passenger trains between stations in said State, and alleges and shows that many thousand other citizens and residents of said State are engaged in business in said State and are large shippers of freight over your orator's lines of railroad between stations in said State,

and that large numbers of persons residing in said State are in the habit of traveling on your orator's passenger trains between
35 stations in said State. Orator further alleges that if it shall disregard, violate, or refuse to put or keep in force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said rates, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations and classifications prescribed by said Commission, on the ground that the same is unjust, unfair, unreasonable, confiscatory, and in violation of the Constitution and laws of the United States, as hereinbefore alleged, said Commission will cause penalty suits to be instituted against it, as authorized by the provisions of the aforesaid Statute, through the prosecuting attorneys of the various judicial districts in said State, through which your orator's lines of railroad extend; that a great number of suits at law for the recovery of penalties for the violation of the numerous rates contained in the schedule known as the Commission's Standard Freight Distance Tariff No. 3 will be brought; that said suits will be brought against your orator for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroad; that a large number of suits for penalties and double damages will be brought against your orator by the aforesaid defendants who are shippers and patrons of your orator and others of the same class, involving a very large number of suits in many counties in said State; that your orator will be required to produce its books and papers in the defense of each
36 of the numerous cases brought by and under the direction of said Commission, and by private shippers and patrons for the purpose of showing that the rates established by said Commission are unreasonable, and would be greatly harassed by being compelled to defend such a multitude of suits.

Orator further alleges that the expense involved in the defense of such suits as will be instituted against it in case it refuses to comply with the illegal, unjust and confiscatory rates, rules and regulations of said Commission would be very great, and would involve great and serious loss to your orator, without regard to the result of such litigation; that under the provisions of the Statutes hereinbefore referred to, your orator would be precluded from pleading or proving the unreasonableness of said rates in proceedings instituted by private shippers, and judgment would doubtless be recovered in many of said actions, and orator would be compelled, in order to protect its property from levy and sale thereunder, to file numerous supersedeas bonds, by which it would be put to considerable expense and inconvenience; that the question as to whether the rates prescribed by the Commissioners as aforesaid are unreasonable or not could not be properly determined in suits of that character, and that the loss which would be sustained by your orator in an attempt to defend such suits would be so serious as to be irreparable. Wherefore, your orator prays leave to sue the aforesaid Defendants, as representatives of all said classes of persons, whether as shippers of freight or as passengers.

Twelfth. Your orator alleges that this cause arises under
37 the Constitution and laws of the United States and that the
matter in dispute and controversy exceeds, exclusive of interest and costs, the sum and value of Two Thousand Dollars.

Premises considered, for as much as your orator is remediless at law and *and* can only obtain relief in a Court of equity, where matters of this kind are cognizable, your orator prays:

(1) That the orders of the Railroad Commission of the State of Arkansas, fixing rates and charges for freight transported by your orator within said State and fixing and establishing joint through freight tariffs on different and independent lines of railroad, and all rules and regulations affecting and concerning the same and each and every part thereof, and each schedule in said orders contained, be set aside and held for naught: that the order of said Commission made on June 4, 1908, to take effect June 15, 1908, fixing and establishing tariffs and charges on freights transported over your orator's line of railroad between stations situated within said State on classes and commodities, and fixing and establishing joint through rates on independent connecting lines of railroad, and all rules and regulations affecting and concerning the same, and contained in said order of June 4, 1908, be set aside and held for naught.

(2) That said Act of the Legislature of the State of Arkansas, approved the 9th day of February, 1907, and the orders of the Railroad Commission of said State, establishing and fixing a rate of two
38 cents per mile for the transportation of passengers between
stations in said State on your orator's railroad and over lines
leased and operated by it in said State, be set aside and held for naught, and that so much of the order made by said Commissioners on June 4, 1908, to take effect June 15, 1908, as relates to the aforesaid passenger rates, and fixes and establishes the same on the basis of two cents per mile, be set aside and held for naught.

(3) That the Defendants, as Railroad Commissioners of the State of Arkansas, be restrained and enjoined from putting into force or taking any step or action whatsoever, looking to the putting into force and effect the aforesaid tariff of charges for the transportation of freight and passengers on your orator's railroad, within the State of Arkansas, adopted by it on June 4, 1908, as aforesaid, and that said Tariffs and all rules, regulations and orders made and promulgated by said Defendants for the purpose of putting the same into effect be set aside and held for naught.

(4) That the provisions of the aforesaid Statute of the State of Arkansas, prescribing penalties against your orator and others in like condition for the failure or refusal to put into force any tariff ordered by the Railroad Commission of said State, or any of the rules and regulations prescribed by said Commission or for charging, taking, or receiving any greater compensation for the transportation of passengers than the rate prescribed by law, be declared void and of no force or effect whatsoever, and that said Commissioners and each and every one of them, their successors in office, agents,

39 servants and employees be temporarily and permanently restrained from enforcing or attempting to enforce the rates, charges, rules and regulations fixed by the orders of said Commission aforesaid; respecting the carriage of freight and passengers within the State of Arkansas, or from enforcing or attempting to enforce through any agency provided in the Statutes of the State of Arkansas, or otherwise, any of the penalties prescribed by the Statutes of said State for failure on the part of your orator to observe any of the aforesaid orders made by said Commission; and that said Commissioners be temporarily and perpetually enjoined and restrained from prosecuting any suit or action, or causing the same to be prosecuted, by any officer or agent of said Commission, or by any officer of the State of Arkansas, or any other person, for the failure to put or keep in effect and to observe the rates of freight and passenger fare and the rules and regulations of said Commission, so fixed and established as aforesaid, or from taking any action with the intent and for the purpose of enforcing the provisions of the order made by said Board on May 15, 1907, fixing rates for the carriage of passengers and freight as aforesaid, or from doing or attempting to do any act or thing, or to require your orator to do any act or thing, by way of compliance with, or for the purpose of carrying out said order, rules and regulations or any part thereof.

(5) That the Defendants, Henry Leigh and George L. McLean, and all other persons belonging to the same class, including all patrons of your orator's railroad, either in the shipments of freights between stations on your orator's lines of railroad in said State, or as passengers on said lines between stations in said State, be enjoined and restrained during the pendency of this proceeding from instituting any suit or suits, action or actions, against your orator for the recovery of any penalties under and by virtue of the provisions of any of the aforesaid acts of the legislature of the State of Arkansas, or for the recovery of double damages under and by virtue of the provisions of any of the aforesaid Acts of the Legislature of said State, and upon the final hearing herein that said Defendants, and all other persons belonging to the classes aforesaid, and who are engaged or may be engaged in intrastate shipments of freight on or over your orator's lines of railroad, or may become intrastate passengers thereon, be perpetually enjoined and restrained from instituting any such suits or actions against your orator.

And your orator prays for such other and further relief as may seem meet, and as it may be entitled to.

And may it please Your Honor to grant unto your orator a writ of subpoena of the United States of America issuing out of and under the seal of this Honorable Court, directed to the said Robert P. Allen, John W. Crockett and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, and the said Henry Leigh and George L. McLean, thereby commanding them and each of them on a day certain therein to be named, under certain penalty, to be and appear before this Honorable Court, and then and there full, true, direct and perfect answer to make to all and singular the

premises, but not under oath—answer under oath being expressly waived—and to perform and abide by such order, direction and decree as may be made in the premises. And your orator will ever pray.

MOORE, SMITH & MOORE,
Solicitors for Complainant.

STATE OF MISSOURI,
City of St. Louis, ss:

S. C. Johnson, being duly sworn, says:

He is General Auditor of St. Louis Southwestern Railway Co., he has read the foregoing bill of complaint and knows the contents thereof. He further states that all facts alleged in said bill on his personal knowledge are true, and such as are stated upon information he believes to be true.

(Signed)

S. C. JOHNSON.

Subscribed and sworn to before me this the 16th day of July, 1908.

[SEAL.] ALROY S. PHILLIPS,
Notary Public, City of St. Louis, Mo.

My commission Expires the 3rd day of January, 1910.

Endorsed on back: Filed and writ issued July 18, 1908. W. P. Feild, Clerk.

Which Exhibit "A" to Complainant's Bill of Complaint is as follows:

(Omitted in printing per stipulation.)

100 UNITED STATES OF AMERICA,
*Western Division of the Eastern
District of Arkansas.*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 6th day of April, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: On July 25th, 1908.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Come Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, by Morris M. Cohn, Esq., their Solicitor, and file herein their answer.

Which Answer of the Defendants is as follows:

101 In the United States Circuit Court for the Western Division
of the Eastern District of Arkansas.

In Chancery.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al.

To the Honorable Judges of the Circuit Court of the United States
for said District:

The Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as members of and constituting the Railroad Commission of Arkansas, saving and reserving to themselves all manner of objection and exception which they may be entitled to save to the many imperfections and insufficiencies in the Bill of Complaint, for answer thereto say:

(1) The Defendants Robert P. Allen, John W. Crockett and John E. Hampton, admit that they are members of and constitute the Railroad Commission of the State of Arkansas.

Answering the first paragraph of the Bill of Complaint, they say that it is true that the Complainant is a corporation, organized under the laws of the State of Missouri, and that its domicile is at the city of St. Louis, in that State, but they also say that as a condition to be permitted to do business as a railroad company in the State
102 of Arkansas it filed a copy of its Articles of Association in the office of the Secretary of State of said State of Arkansas, as provided by Art. 34, p. 34, and following of the Acts of the General Assembly of the State of Arkansas, being Act approved March 13, 1899, and that said Complainant as such corporation operates lines of railroad between different points in the said State of Arkansas, including the cities of Little Rock, Pine Bluff, Texarkana and many other cities and towns in said State.

(2) Answering the 2d paragraph of the Bill of Complaint, they say that it is true that they reside in the districts therein mentioned and that the Legislature of the State of Arkansas has fixed and established the domicile of said Railroad Commission at the City of Little Rock, in the County of Pulaski in said State; and the Defendants, Henry Leigh and George McLean, therein mentioned, are citizens of the State of Arkansas, and reside in the city of Little Rock in said District.

(3) Answering the 3d paragraph of the Complaint, the Defendants say that it is true that the said Railroad Commission was created by the Act of March 11, 1899, as set forth in said paragraph, but that said paragraph has omitted to state that suits for damages and costs sustained by any person, firm or corporation under the

provisions of the Act referred to had to be instituted within a year from the accrual of the right, or same became barred.

103 But the Defendants deny that the effect of the provisions of said Act of March 11, 1899 was to deny to the Complainant and to all other persons and corporations operating railroads in said State, the right to a judicial investigation of the validity and reasonableness of the rates, rules, regulations and classifications prescribed by said Commission, or, that it deprived Complainant and all others in like condition of due process of law, contrary to the provisions of Section 1 of the Fourteenth Amendment to the Constitution of the United States. For they say that by the terms of Sections 6813 and 6814 of Kirby's Digest of the laws of the State of Arkansas, as construed by the Supreme Court of Arkansas, the rates, rules, regulations and classifications referred to have only prima facie effect, and they aver that this did not amount to a deprivation of due process of law within the meaning of Section 1 of the Fourteenth Amendment to the Constitution of the United States.

(4) Answering the 4th paragraph of the Complaint, Defendants say that it is true that Standard Freight Distance Tariff No. 3 was adopted in lieu of all preceding tariffs on June 15, 1908, but they aver that said Standard Freight Distance Tariff No. 3 was substantially similar to Standard Freight Distance Tariff No. 2, adopted by said Railroad Commission on the 15th day of July, 1904; and they also aver that the Standard Freight Distance Tariff No. 2 was a repetition in substance of the first Standard Freight Distance Tariff adopted by the said Railroad Commission on April 10, 1900. Defendants say at different times during the history of said Railroad Commission,

104 technical questions were raised as to whether certain items were faithfully adjusted, and it was necessary to dispose of such matters by rulings or constructions. This being found unsatisfactory, when Standard Freight Distance Tariff No. 3 was issued, the said Railroad Commission gave notice that it would take up, at the meeting of June 4, 1908, the question of adopting it as a whole. It was formally adopted and thus disposed of any inadvertent discrepancies which had crept into the compilation previously. And the Defendants aver that there is no substantial difference between the freight rates adopted by the said Standard Freight Distance Tariff No. 3 and those first put into effect on April 10, 1900.

(5) Defendants, answering the 5th paragraph of the Bill of Complaint, deny that the charges and rates prescribed in the said Standard Freight Distance Tariff No. 3, as well as the preceding Tariff No. 2, applying on commodities and classes, or otherwise, were, or are, in any respect, unreasonable, unjust, oppressive, discriminatory, confiscatory or void, either in respect to said order as a whole or in respect to each and every rate, charge, tariff, schedule, classification, rule or regulation separately considered. And they say they do not know how much the railroad equipment, property and franchises, owned and used by complainant in operating its said road in said State, represents, but they deny that the sum of \$16,023,090.00 correctly represents the said investment. They deny that Complainant has exercised as great a degree of economy in the use and operation

of said property as was compatible with the interests of the public and with safe and efficient service to the public, or, that it
105 only employed such officers, agents or employes, or expended only such amounts in the maintenance and repair of its road-bed, tracks and stations, or for new equipment of engines, cars or other appliances necessary to the operation of its road and the maintenance of said property, as was necessary and essential to a due and proper operation of its trains or to the maintenance of said property with due regard to its preservation and the safety of the public.

They deny that no unreasonable salaries or wages have been or are now being paid to any of its officers, agents or employees. They deny that Complainant has practiced all reasonable and proper economy in the operation and maintenance of its railroad, and they deny that the operation of said road, if properly and economically conducted, would not yield a profit exceeding fifteen per cent at the rates prescribed in said tariff. They deny that said rates do not and will not yield a just and reasonable return upon the value of Complainant's property used in said service, whether in respect to the money invested in said property or the service rendered. They deny that the total earnings of the Complainant from its intrastate business in the transportation of freight in the State of Arkansas, during the year 1907 did not exceed the sum of \$351,735.60. They aver that the condition of affairs in the United States in the year 1907, financially and commercially, should form no criterion for other years, because they say that conditions were very much depressed in the concluding and busy months of said year, by reason
106 of a panic which stopped a great many industries and curtailed business of all kinds, including transportation by railroad. They deny that the expense of operation solely incident to intrastate business, and the fixed charges solely incident and chargeable to the intrastate transportation of freight, was \$346,245.47. They deny that the total earnings of the Complainant's property from the transportation of freight, wholly within the State of Arkansas is not and will not be sufficient, under the rates on classes and commodities prescribed in the said tariff, — pay operating expenses, charges for maintenance, taxes and other necessary fixed charges, appertaining to said business, and yield any returns by way of compensation for the services rendered by Complainant. And they deny that the effect of such rates is and will be to prevent Complainant from receiving any returns or profits for the service rendered by it to the public, or will deprive it of its property without due process of law, or will deny it the equal protection of the law.

(6) Defendants, answering the second part of the 5th paragraph of the Complaint, admit that coal fields are situated as stated therein, and that coal mined in said counties is shipped from the stations mentioned therein, and that commodity rates on coal are as stated therein, but they deny that the said rates, either as a whole or otherwise, do not pay the cost of service, including the terminal service, or, are in any respect unreasonable, unjust or confiscatory. They admit that some of the coal shipped from the aforesaid stations,

is transported over connecting lines of railroad, but they deny that a large part of it is. They say on information and belief that a very small part of said coal was transported over connecting lines of railroad. And, they further aver that if the rates prescribed applied, whether said commodity was shipped over one or more than one railroad under the regulations adopted by them, there was nothing unusual or unjust about it; that such rates were fair and remunerative, and that Complainant never heretofore complained to the Commission by any specific method of complaint wherein it set forth that the rates were confiscatory, or asked the said Railroad Commission to increase said rates whether applicable to hauls that required the service of more than one carrier, or otherwise. They deny the allegations in said part of said Complaint that any one of said rates was discriminatory or did not afford to the said lines or either of them a fair, reasonable or just compensation for the services rendered in transporting said products.

(7) Answering the part numbered 3 of the 5th paragraph, Defendants say that they do not know how large a proportion of the entire tonnage transported over Complainant's lines of railway originating in Arkansas consists of timber and timber products, but they deny that at least 90 per cent of said tonnage was shipped from points in said State to points in other States, or was interstate commerce. They are advised that it is not material for them to reply to that part of the said Complaint which states the custom prevailing between shippers and the railroad companies in said State of concentrating rough lumber at milling points. But they deny that on April 1, 1907, or at any other time, they recognized the

108 said practice and for the purpose of regulating the same made an order that the rates mentioned in said part of the complaint should apply on the shipment of rough lumber, staves,itches, bolts and logs in cut loads between all points in Arkansas set forth in said Complaint. They admit that said rates were made upon the condition expressed in the order that the manufactured products should be re-shipped over the same line bringing in the rough material. But they deny that such shipment contemplated an interstate shipment or a shipment beyond the limits of the state, or that it was an attempt in any manner to control shipments beyond the State. They deny that at any time any rate established by them was published or had the effect of operating as a rate applicable to interstate commerce. And they deny that any order made by them in relation to the rate of transportation for lumber in the rough or otherwise was made with the intent and purpose of establishing, regulating or fixing interstate rates on such material or commodities by any device, though they admit that the rates established from the point of origin of rough material to the point of concentration for milling purposes was based upon the custom of railroad companies to recognize the somewhat cheaper rates from the point of origin to the place of concentration, in consideration of their obtaining the whole haul. But the Defendants deny that there is any universal practice prevailing among shippers and railroad companies in said State where the timber is situated at a dis-

tance from the mills, to have it transported by rail and concentrated at milling points for the purpose of being converted into lumber and other products, and take the prevailing rate under interstate shipments from the point at which the shipment of rough material originated in said State to the destination of the milled product in other States. They deny that there is any milling in transit privilege recognized or countenanced by them, which is an incident of interstate commerce, or affects the interstate character of shipments of lumber. They deny that the aforesaid rates are unreasonable or oppressive, or that they do not afford the carrier any compensation whatever for the service rendered in connection with the transportation of said commodities, or are confiscatory, or take the property of complainant or other carriers in said State without compensation, or are in violation of Section 1 of the Fourteenth Amendment to the Constitution of the United States, prohibiting the taking of property without due process of law and without compensation, or denying to any person the equal protection of the law.

(8) Answering the part numbered 4 of the 5th paragraph of the complaint, defendants say that the rates set out therein are correctly stated, but that the rates are flat or local rates, and have no reference to any interstate shipments whatever; that the said Defendants, as such Railroad Commission, have not at any time adopted any custom of concentrating cotton at compression points for the purpose of having the same compressed and transported outside of the State of Arkansas; that they have not made any regulations in reference to any such custom, but have confined themselves to making flat rates for delivery of cotton at points in the said State of Arkansas.

They are advised that it is not for them to answer that part of said complaint that describes the manner in which cotton is concentrated at compression points, and they deny that the order, copied by the Complainant in said part of its Complaint, in any way attempts to regulate interstate commerce; that no attempt was made by the said Railroad Commission, by anything recited in the said order, nor has it ever taken any action which could be construed as intending to affect the transportation of cotton from a point in the State of Arkansas to a point without the State of Arkansas, which, during the transportation, was unloaded at a Compress and put into compressed form instead of an uncompressed form. And they deny that the flat rates so made in any manner conflict with the jurisdiction of the Interstate Commerce Commission of the United States, or with the movement of cotton, or any part thereof, which has been treated and recognized by the Interstate Commerce Commission as interstate commerce. They deny that there was any direct or intentional interference with interstate commerce, either as regards the rates or regulations in reference to the transportation of said cotton. They deny, therefore, that the said rates were unlawful and void, and they also deny that they are unreasonable, unjust or oppressive, or did not afford any profit to the carriers handling the same or are confiscatory, or are

in violation of the aforesaid provisions of the Fourteenth Amendment to the Constitution of the United States.

(9) Answering that part of the 5th paragraph, which is numbered 5, Defendants admit that the Complainant owns and controls

111 the lines of railroad mentioned in said part of its complaint, but they deny that the said roads are operated as a unit. They admit that a very large amount of interstate traffic passes over the said roads and each of them. They deny that the local rates in the several states in which and through which said lines pass enter to a very large extent and have a controlling influence on the through rates charged on interstate commerce. They aver that all local rates established by the said Railroad Commission are within the province of the said Commission, and have reference solely to intrastate commerce; that the said Railroad Commission of the said State of Arkansas has had nothing to do with through rates applying to interstate commerce on the lines of the said Complainant or any other railroad company. They deny that the matters alleged in said part of said complaint, as far as they seek to show that the local rates made by Defendants enter into through rates made by the Complainant in interstate traffic, are material. They deny that, by reason of any of the matters set forth in said part of said complaint, the rates established by said Railroad Commission were made with the intention and for the purpose, or that each and all of said rates so established will have the effect of regulating and fixing interstate rates on all such classes and commodities or that the same amount to an attempt to regulate interstate rates or affect interstate commerce, or are in violation of the Constitution of the United States, or are an invasion by the Defendants of the powers, rights or duties vested exclusively by the acts of Congress in
112 officials of the United States.

(10) Answering that part of paragraph 5th which is numbered 6, Defendants say that the Act of April 8th, 1903, passed by the General Assembly of the State of Arkansas, the said Railroad Commission was invested with the power to establish joint rates and to provide for continuous carriage; that they do not know whether the terms of the said Act are correctly copied in the said part of said complaint or not. They admit that they have assumed to act under the terms of the said Act and that they have put in force joint rates, and that the rates are correctly stated in said part of said Complaint. They aver that prior to the enactment of the said Act of the Legislature, the said Commission did not have the power to deal with continuous transportation and joint rates, and that the said Act was passed for the purpose of enabling the said Commission to deal with the matter, which was necessary to the protection of the shippers of the State of Arkansas; that prior to the enactment of the said act, there were great evils growing out of the practice of the railroad companies in said State, including that of the Complainant, whereby a haul that was really continuous was split up into fragments over the different lines which were formally described as independent lines, though all under one management, and different local rates over each of the lines was applied to the great damage of numer-

ous shippers in the said State; that it was deemed to be just and proper by the Legislature of the State of Arkansas to correct this practice by passing and to provide a method of joint rates
113 and joint routes that should be just to the railroads of said State as well as to the shippers. So, the said Act was passed by the Legislature of Arkansas at the time stated. That the rates so established by Defendants were established after careful inquiry and proper hearing of the railroad companies and other parties concerned; that the said Complainant has never filed any petition before the said Railroad Commission, complaining of the said joint rates so established, or any other orders relating to joint traffic, established by the said Railroad Commission. They say, as they are advised, that the said law was within the proper province of the Legislature of the said State of Arkansas, and they deny that the said joint rates are insufficient to afford any return whatever for the service rendered by the several railroads engaged in the transportation of through freight, or that said order is unjust, oppressive or confiscatory, or that its effect would be to deprive Complainant or any other railroad company operating in said State of their property without due process of law, or will deprive them of the equal protection of the law, in violation of any provision of the Fourteenth Amendment to the Constitution of the United States.

(11) Answering paragraph marked 6th, Defendants admit the passage of the Act of February 9, 1907, referred to in said paragraph, and admit the provisions of Section 6620 of Kirby's Digest of the laws of the State of Arkansas. They admit that the said Railroad Commission on May 15, 1907, made the order mentioned in the said paragraph, but they deny that there was any necessity
114 for the order, or that it worked any damage or detriment to the said Complainant. They say, upon information and belief, that the railroad companies were in the habit of charging three cents a mile on lines seventy five miles in length prior to the enactment of said law, but they deny that the said three cents per mile, after deducting therefrom the cost of conducting said business in said State, the actual operating expenses and maintenance and fixed charges principally appertaining to the said business, were not sufficient to yield adequate and reasonable profits or returns upon the value of the property used in and about said business, or for the service rendered the public.

They aver that the traffic in the said State of Arkansas, as they are informed and believe, by reason of the reduction in the rate from three to two cents has increased to such an extent that the said Complainant was not in any manner injured thereby, and that it yielded a large enough revenue to leave a considerable profit to the said Complainant, unless it was unreasonable and extravagant in the management and operation of its road, or demanded profits upon fictitious values. Defendants deny that the Complainant felt constrained to abide by the provisions of the Statutes of said State of Arkansas, by reason of any of the matters alleged by it in said part of its complaint. They deny that any statutes of said State made any rates, charges, orders, rules, regulations or classifications

prescribed by said Commission in actions between private parties and railroad companies conclusive. They deny that such companies were denied the right by any Statute of the State of Arkansas to question or investigate the fairness or reasonableness or legality of any rates, charges, orders, rules, regulations or classifications. They deny that there were any harsh or severe penalties prescribed for the failure or refusal to put in force tariffs or charges or rules, regulating railroads prescribed and put in force by said Commission. They deny that there was anything unusual about the penalties prescribed for the failure to comply with the provisions of the Act reducing passenger fares. They admit that said two cent rate has been in force on Complainant's lines of railroad in said State since the aforesaid Statute and order took effect, and they say that the said Complainant never heretofore made any complaint on account thereof. And they deny that the earnings from intrastate transportation of freight and passengers in said State during any period have not been sufficient to pay operating expenses and the cost of maintenance and fixed charges properly chargeable to said business, or that it has been compelled to operate its freight and passenger trains at a loss of revenue. They deny that the total earnings from the transportation of passengers between stations in the State of Arkansas, during the last half of the year 1907, did not exceed \$440,355.13, or that the total expense of operation solely incident to said business, including all fixed charges, except interest charges, was \$469,823.10 for the same period, or that said period represents the average earnings through the entire year. They aver that during the latter part of the year 1907 a monetary and commercial panic prostrated all industries in the United States, including the State of Arkansas, and that by reason of this fact the business of transporting passengers and freight was very much reduced on all the lines of railroad throughout the United States and in the State of Arkansas, and that by reason of this fact the earnings from that source in the said part of the year 1907 could not be taken as a criterion.

116 (12) Answering the 7th paragraph of the complaint said defendants say that they are unable to understand what is meant by the allegation that the State of Arkansas contains no large cities and very few commercial centers. They admit that a great deal of the jobbing and wholesale trade of said State is interstate business, and they say that the interstate feature of the business is for the most part confined to shipments from the Eastern Seaboard, from the north and from the south, to the wholesale jobbers of the State. They deny that the population is sparse and very small as compared with the mileage of railroads operating in said State, or that either the freight or passenger business of Complainant and of all other railroads operating in said State is light, or that the rate of two cents per mile for the carriage of passengers and the freight rates prescribed in any orders of the Railroad Commission of said State are unreasonably low. They deny that neither Complainant nor any other line of railroad operated in said State is able to earn a reasonable compensation for the service rendered in the carriage of

passengers or freight within said State, after paying the necessary expenses of operating and other expenses necessary and incident to the intrastate business in said State.

117 They deny that the expense of operating and maintaining the railroads and properties of the Complainant in said State has been materially increased by reason of the legislation of said State, or the rules, regulations or orders of said Railroad Commission. They deny that during the session of the legislature at which the Statute requiring the reduction of one third in the passenger rates was enacted, many Statutes imposing burdens and increasing the expense of operating and maintaining the railroads were passed, and they say that whatever laws were passed were rendered necessary by evils and necessities which grew up with the increasing population in the said State, and the indifference of the Complainant and other railroad companies for the lives of brakemen. They deny that many of the requirements contained in the said Acts were not necessary to the safe and efficient operation of trains, or that a large amount of expense had been incurred or will be necessary in making and maintaining the changes provided for in such legislation without any increase in the revenue by reason thereof. They deny that the said legislation as construed by the Supreme Court of the said State, will greatly increase the cost of conducting the business of complainant or other persons or corporations engaged in like business in said State. They deny that all the earnings of all its lines of Railroad within said State on the business transacted by it in the State are not sufficient to pay the expense of operating principally applicable to said business, or that they do not afford any

118 adequate or reasonable returns on the money invested in said property.

(13) Answering the 8th paragraph of the Complaint, Defendants admit that the lines of railroad operated by Complainant were constructed under grants of the State of Arkansas, but deny that the said Complainant had any other right to collect tolls than was implied in the organization of said railroad company. They admit that the said Complainant was entitled to a return upon the fair value of its investment over and above the expense of operating and maintaining it, but they deny that the Complainant can include in the yearly expense of operation and maintenance expenditures made for permanent improvements or those matters that are in the nature of permanent improvements. They deny that there grew out of said grants and was necessarily implied therefrom any other agreement or contract than has just been stated. They admit that the General Assembly of the State of Arkansas on July 23, 1868, passed a general law for the creation and organization of railroad corporations, and that the section which is still written in Kirby's Digest of the Statutes of Arkansas, and known as Section 6590 was contained therein. But they allege that at the time the said Act was passed, there was a provision in the then existing Constitution of the State of Arkansas, Art. V. Sec. 48, Constitution of 1868 of said State, which provided:

"That the General Assembly shall pass no special Acts conferring

corporate powers. Corporations may be formed under general laws; but all such laws may, from time to time, be altered
119 or repealed," said Section applying to railroad corporations, but subsequently to-wit: on the 30th day of October 1874, a new Constitution was adopted, by Art. XII, Sec. 6., of which it was provided:

"That corporations may be formed under general laws, which laws may, from time to time, be altered or repealed. The general assembly shall have the power to alter, revoke or annul any charter of incorporation now existing and revokable at the adoption of this Constitution, or any that may hereafter be created, whenever, in their opinion, it may be injurious to the citizens of this State, in such manner, however, that no injustice shall be done to the incorporators."

That whatever rights accrued to any railroad company organized under either of said Acts were taken subject to the right of the General Assembly of the State of Arkansas to alter or repeal the same; and that subsequently, by the provisions of the Act of March 11, 1899, and Acts supplementary thereto, of the General Assembly of the State of Arkansas, the Railroad Commission was invested with power to fix the reasonable rate for all railroad companies and that it adopted the rates which have been heretofore mentioned, pursuant to the authority vested in said Commission by the Acts of the General Assembly aforesaid. And these Defendants deny that the said Section 6590, of Kirby's Digest is in force and effect. They deny that the Complainant's lines of railroad, or any of those which it acquired and under whom it holds were constructed on the faith that the State would in good faith carry out and perform any
120 agreement in regard to rates to be charged by railroads in said State, either with reference to annual profits or otherwise.

They deny that upon the pretended faith of said provision of Kirby's Digest, or any other provision of the laws of the State of Arkansas, the General Assembly agreed with the Complainant, or otherwise, that it would not by direct legislation or through any agency created by it, impose on the persons and corporations owning and operating said railroads, rules, regulations or tariffs as would deprive them of a profit of fifteen per cent per annum on the capital actually paid in. They aver, however, as they are informed and believed, that the said Complainant is earning a profit of fifteen per cent per annum, if not more, on the capital actually paid in. They deny that Complainant has voluntarily reduced its rates from time to time as the development of the business of the lines and the conditions of the country would warrant and demand; they say that when the rates were made which it now complains of, it made no complaint thereof to the Railroad Commission of Arkansas, in order to have the matter inquired and corrected, if any complaint is had, which they deny. They deny that the Complainant is not able to earn fifteen per cent per annum on the capital actually paid in by reason of the Act of February 9, 1907, or any orders of the Railroad Commission of said State. They deny that the action of said State in fixing said rates was unreasonable and confiscatory, or that

it deprived complainant by any legislation or acts or orders of said

Railroad Commission, of the power to earn a profit of not less
121 than fifteen per cent per annum on capital paid in. They

deny that there was any impairment of any obligation of any contract which the State entered into with said Complainant in conflict with any provision of the Constitution of the United States.

(14) For answer to the paragraph marked 9th of the Complaint, said Defendants say that no penalty imposed by any provision of any legislation of the Legislature of the State of Arkansas applies except where the act of wrong doing is done by the Complainant. And they aver that the occasion on which the provisions of said Statutes of the State of Arkansas were disregarded by the said Complainant and the occasions when its action was oppressive and harmful to shippers and other persons in the said State of Arkansas, were so numerous and repeated and became so intolerable and unbearable, that the General Assembly found it necessary to attach penalties of greater or less size to enactments and requirements of the laws of said State in order to obtain an observance thereof by the said Complainant and other railroad companies in said State of Arkansas; and that if the said Complainant and other railroad companies had shown a disposition to act fairly with the shippers and other persons in the said State of Arkansas, such enactments would not have been passed; that there is no way that they may know nor of which they have been advised, by which a railroad company can be induced to carry out its obligations, except by the infliction of penalties, and that if sometimes these penalties are

severe, it is because, in the wisdom of the Legislature of
122 the State, a smaller penalty would be disregarded. They deny

that the penalties and liabilities imposed by any provisions of any Statute are so severe as to constrain persons and corporations subject to the provisions of said legislation to submit thereto, however illegal, rather than take the risk of incurring such pretended enormous liabilities and penalties. They deny that the effect of these would be to utterly bankrupt and destroy said Complainant or any other railroad company, or cause the person whose money is invested in such property to forfeit their entire investment. They say that the Complainant has not hesitated to disregard the law whenever it saw fit to do so and contest its rights before the Courts of the State of Arkansas, and whenever it was in the right the Courts of Arkansas have protected it, as disclosed by decisions under the Statutes enacted by the last General Assembly of the State of Arkansas. They deny that no private officer, agent or employee of any such railroad could afford to take the risk of the penalties and forfeitures imposed upon him personally by said Statutes. They deny that the Complainant and all other persons and corporations operating railroads in said State, subject to the provisions of the aforesaid Statutes have been coerced into compliance with any illegal or confiscatory legislation by said State or orders made or promulgated by said Railroad Commission, rather than to subject said property, or the officers, agents or employees employed in and

123 about the operation of the same to a great multitude of suits or prosecutions that would have followed the failure or refusal to put such rates in force, and they deny that the said rates, both as to freight and passenger, can not be continued in effect without irreparable loss to the Complainant or serious or irreparable injury to and destruction of the property, rights and interests of the Complainant, and of all persons interested in said property as creditors or stockholders.

(15) And for answer to the paragraph marked 10th of the complaint, said Defendants say that it is not true that the penalties prescribed by the Statutes of the State of Arkansas for the violation of the rules and regulations of said Commission, and the rates of freight and passenger fares put in force by said Commission are unreasonable and excessive in amount. They aver that they have been advised that it is not a ground of complaint against the laws of the State of Arkansas that a party has been a frequent and persistent offender, and because of this fact the penalties that he may have incurred may aggregate a considerable sum. And they have been advised and aver that if accumulated penalties are incurred on any account by an offender of the said laws, it is due to a disposition of the person to frequently offend. And they have also been advised and aver that it is not an excuse to an offender that he has a constitutional disposition to disregard the law and commit offenses prohibited by the laws of the State under which he exists and does business. They deny that the said penalties were immoderate or out of proportion of the acts designed to be punished. They deny

124 that they are absurd or unreasonable in that they apply without discrimination to a great variety of acts that are wholly unlike and dissimilar, both in regard to the nature of the act done or omitted, and in the effect thereof upon the right of the public and individuals. They deny that any provisions of the Statutes are designed to operate as a menace to compel unquestioning obedience on the part of the railroad companies, their officers, agents and employees, to all orders, rules and regulations promulgated by said Commission without regard to their lawfulness, by exposing said companies to such ruinous fines and penalties, and the officers, agents and employees of said companies likewise to such severe and ruinous penalties, as to deter said companies and the officers, agents and employees thereof, from resisting on any ground, however harsh or unreasonable, the action of said Commission may be or seem, or for the purpose of deterring any parties from resorting to the Courts for the purpose of testing the validity of any rules, regulations and rates for fear of being harassed and oppressed by a multitude of prosecutions and suits during the pendency of such proceeding, or because of the consequences to them in case they should fail to maintain the ground of contest. And they deny that any of said provisions were discriminative, or deprived complainant, and all others in like condition, of their property without due process of law or the equal protection of the law, or imposed unreasonable fines or unusual punishment, within the meaning of the Constitution of the United States or of the State of Arkansas.

(16) And for answer to the said paragraph- marked 9th
125 and 10th of the complaint, and also some of the preceding
paragraphs of the said complaint, in which an effort is made
to maintain a bill in equity for the purpose of testing the constitutionality of the laws of the State of Arkansas applicable to railroads and railroad rates, without reference to any existing and actual cause of complaint, these defendants aver, as they are advised, that such matters are not within the jurisdiction of a Court of Equity and do not present a case for equitable relief.

(17) For answer to paragraph marked 11th of the said complaint, said defendants say that they do not know and are not advised whether Henry Leigh or George McLean, their co-defendants, are in the habit of traveling on Complainant's trains or not, nor whether they are large shippers of freight on the lines of railroad of the Complainant, but they admit that a large number of persons residing in the said State are in the habit of travelling on Complainant's passenger trains between stations in said State. They deny that if the Complainant shall disregard, violate or refuse to put into force the aforesaid rates prescribed by said Commission for the transportation of freight and passengers, or any or either of said roads, or shall violate or fail to carry into effect any of the rates, charges, orders, rules, regulations or classifications prescribed by said Commission, on the ground that the same are unjust or unfair or unreasonable or confiscatory, or in violation of the Constitution or laws of the United States, that the said Commission will cause penalty suits
to be instituted against it as authorized by the provisions
126 of the aforesaid Statutes, through the prosecuting attorneys
of the various judicial districts in the State. They deny that at present a great number of suits at law for the recovery of penalties for any prospective violation of rates contained in the schedules known as Standard Freight Distance Tariff No. 3 are in contemplation. They deny that any suits will be brought against complainant for the violation of each of the rates for the transportation of passengers as well as freight between the many stations on its lines of railroad, or that any large number of suits for penalties or double damages will be brought against Complainant by these defendants or by any defendants who are shippers and patrons of Complainant and others of the same class involving a large number of suits in many counties in said State. But they admit that if suits are brought it may be that the said Complainant will be ordered to produce its books and papers in the defense of such cases, but no more so than other persons whose defense depends upon books of account. They deny that the said Complainant has been afflicted with suits for acts of wrong-doing done by it to shippers and other residents within the said State of Arkansas, but aver on the contrary that the disposition of the people of said State and of the said Railroad Commission has been to overlook most of the acts of wrong, if not nearly all the acts of wrong, done by said Complainant, except in instances where the wrongdoing of the said Complainant was of so aggravating a character and involving such gross discrimination in favor of its coal mines as to justify action upon the part of the said Railroad Com-

mission. And they said that if the said Commission ever had
 127 to institute suits, they were finally decided in favor of the
 contention of the said Railroad Commission. And they further say that in all cases where the General Assembly of the State of Arkansas came up for consideration, relating to the duties of common carriers by rail, the acts have been so construed as to give the said common carriers the benefit for any reasonable excuse they had for not complying with said provisions of the Statutes. They deny that any improper expense would be entailed by the said Complainant by reason of the enforcement of any of the said rates, rules or regulations of said Commission, or that it would be in any manner great or involve any great or serious loss to Complainant. And they say that if the complainant is correct in saying that it would be precluded from pleading or proving the unreasonableness of said rates and proceedings instituted by private shippers, it could correct the same by testing the reasonableness thereof in a direct proceeding had for that purpose. But they say, as they have heretofore said, that by the provisions of the Statutes of Arkansas, the rates fixed by said Railroad Commission are not conclusive; that it can be shown in defense thereto that they are unjust, and the only effect they have is that they are taken to be prima facie binding until they are shown to be unreasonable and for that reason unenforceable. They deny that the question as to whether the rates prescribed by the Commission are reasonable or not could not properly be determined in a suit of that character, or that the loss sustained by Complainant in an attempt to defend such suits would be serious or would be irreparable.

128 And, having answered, these defendants ask that the complaint be dismissed, and that they be permitted to go hence with their costs.

W. F. KIRBY, *Attorney General*;
 ROSE, HEMINGWAY, CANTRELL &
 LOUGHBOROUGH,
 MORRIS M. COHN,

Sol's for said Defts.

STATE OF ARKANSAS,
County of Pulaski, ss:

John E. Hampton, one of the Defendants herein, being duly sworn, says that the matters and things set out in the foregoing answer as being based on personal knowledge are true, and that the matters and things set out as being upon information, he believes to be true.

(Signed)

J. E. HAMPTON.

Subscribed and sworn to before me this 25 day of July, 1908.

[SEAL.]

NOEL LOEB,

Notary Public.

My Commission Expires Jan. 6, 1910.

Endorsed on back thereof: Filed Jul- 25, 1908. W. P. Feild,
 Clerk.

129 And on July 31, 1908, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Now on this day comes the Complainant by its solicitors, and come the Defendants by their solicitors, and thereupon the hearing of Complainant's application for temporary injunction is continued and said application is set for further hearing on August 31, 1908, before the undersigned Circuit Judge at Chambers at St. Paul, Minn.; and it is thereupon ordered that the Complainant serve the Solicitors of the Defendants with copies of affidavits and exhibits to be used by the Complainant at said hearing, on or before August 8th, 1908; that the Defendants serve the Complainant's Solicitors with all affidavits and exhibits to be used by them at said hearing on or before August 24, 1908; and that Complainants serve Defendant's Solicitors with any rebutting affidavits and exhibits that they intend to use at said hearing on or before August 29, 1908.

Done at St. Paul, Minn., July 28, 1908.

(Signed)

WILLIS VAN DEVANTER,

Circuit Judge.

And on September 3, 1908, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

130 ROBERT P. ALLEN, JOHN W. CROCKETT, and JOHN E. HAMPTON, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

Injunction.

This cause came on to be heard on the motion of the Complainant for a temporary restraining order, and after submission of the proofs was argued by Counsel; and now upon consideration thereof, it is ordered as follows:

That as to the Complainant, all the rates prescribed by the Defendants, the Railroad Commissioners of the State of Arkansas, for transporting and carrying intrastate freights in said State in Standard Freight Distance Tariff No. 3, which was issued by the order of said Commissioners, which took effect on June 15, 1908, and all amendments and supplements thereto, be and are hereby suspended and the enforcement of each and all thereof be and the same is hereby restrained and enjoined until the further order of the Court.

It is further ordered that the enforcement of the two cent per mile rate, prescribed in an act of the Legislature of the State of Arkansas, approved February 9, 1907, entitled, "An Act to Amend Section 6611, of Kirby's Digest of the Statutes of Arkansas, by fixing passenger rates in this State, and for other purposes," and also prescribed in the order made by the Defendants, the Railroad Commissioners of the State of Arkansas, on May 15th, 1907, putting in force the rates prescribed by the aforesaid Statute, be and the same is hereby suspended and restrained as to the Complainant herein, until the further order of the Court.

It is further ordered that no suit or suits, action or actions, 131 shall, at any time, be instituted or maintained against the Complainant, its officers, agents or employes, by any of the Defendants for or on account of its failure to continue or keep in force any of the aforesaid inhibited rates, during the time that this order shall continue in force, and that the Defendants, the Railroad Commissioners of the State of Arkansas be and they are hereby enjoined from at any time instituting or prosecuting any suit or action as aforesaid, or causing the same to be instituted or prosecuted by any officer, agent or attorney, of said Commission, or by any officer of the State of Arkansas, or any other person for a failure to keep in effect and observe the aforesaid inhibited rates; that the Defendants, Henry Leigh and George L. McLean, and all other persons and each of them from and after the time that they shall have knowledge of this order be enjoined from at any time instituting any such suit or action for or on account of any failure of the Complainant to keep in effect and observe said inhibited rates or for the recovery of damages by reason of such failure during the time that this order shall continue in effect.

It is further ordered that Complainant execute a bond to the United States of America in the penal sum of two hundred thousand dollars, conditioned that said Complainant shall keep a correct account showing as respects every carriage of passengers and freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question, and the stations between which the same occurred, the name of the person affected, so far as may be practicable, which record shall be made and 132 kept subject to the further order of this Court, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of existing rates should not have been granted, that said complainant shall, within a reasonable time to be fixed by the Court refund in every instance to the party entitled thereto the excess of charge over what would have been charged had the inhibited rate been applied, together with lawful interest and damages.

It is further ordered that this order suspending the aforesaid inhibited rates and restraining the said defendants take effect upon the filing of the aforesaid bond and the approval thereof by the Clerk of this Court, but not within less than ten days hereof. Nothing recited in this order shall operate to prevent the said Railroad

Commissioners of the State of Arkansas from establishing and enforcing any reasonably compensatory and lawful rates in place of those whose enforcement is hereby inhibited.

Dated September 3rd, 1908.

(Signed)

WILLIS VAN DEVANTER,
Circuit Judge.

And on the same day the following Memorandum Opinion of Court was filed:

133 In the Circuit Court of the United States for the Eastern District of Arkansas, Western Division.

IN re ARKANSAS RAILROAD RATES.

Mr. John M. Moore, for Complainants.

Mr. William F. Kirby, Attorney General, Mr. George B. Rose, and Mr. Morris M. Cohn, for Defendants.

Memorandum Opinion.

VAN DEVANTER, *Circuit Judge*:

The matter now under consideration is an application in each of four suits against the railroad commissioners of the State of Arkansas and others for a temporary injunction restraining the enforcement of the prescribed rates for the transportation of freight and passengers in intrastate commerce in that State, it being contended on the part of the complainants that these rates are unreasonable, non-compensatory and, therefore, confiscatory. The matter was first brought on for hearing on July 28th last, when, at the request of the defendants, the hearing was postponed until August 31st that they might be better prepared to meet the contentions of the complainants. On the latter date the parties appeared, and three days were consumed in the presentation of proofs and in the arguments of counsel. Each of the four railroad companies is engaged in the transportation of freight and passengers, both intra-state and inter-state, in the State of Arkansas, and each has made a practical and extended application or test of the rates in question. The freight rates were

134 prescribed by the railroad commissioners while acting under the state statutes, and the passenger rate, which is two cents per mile, was prescribed by statute. The proofs disclose the revenues actually derived by each railroad, upon the application of these rates, from its business in the State, the revenues from each class of traffic being stated so as to show separately the earnings from intra-state freight, inter-state freight, intra-state passenger and inter-state passengers; and also disclose the value of the property employed by each road in the traffic within the state, the taxes paid thereon, the actual cost of conducting the freight traffic and the actual cost of conducting the passenger traffic. The first question for consideration is, How shall this cost be apportioned between the intra-state and inter-

state traffic? The proofs make it quite plain that the production of a given amount of revenue is attended with greater cost in intra-state business than in inter-state business; and that this is a generally recognized fact is attested by the decisions in other cases where the reasons which make it so are fully stated. *Chicago, etc., Co. vs. Thompson*, 176 U. S. 167, 178; *Minneapolis, etc., Co. vs. Minnesota*, 186, U. S. 257, 262; *Northern Pacific Ry. Co. vs. Keyes*, 91 Fed. 51, 53. Here the additional cost is shown to be at least 100 per cent in freight traffic and at least 15 per cent in passenger traffic, and this is not more than what has been shown in other cases. Undoubtedly these difference- furnish a standard by which to apportion the total cost between the traffic which is intra-state and that which is inter-state. Other standards are suggested, but the proofs in the case that none of them are as satisfactory or accurate as is the difference in costs in its relation to the revenue. That standard must therefore be applied, and this may be done in this way, taking the freight and passenger traffic separately; Increase the intra-state earnings by

135 the ascertained percentage representing the difference in cost, thereby ascertaining what would have been earned by the same actual expenditure in conducting the intra-state traffic, had it been attended with the same relative cost as the inter-state traffic; then add the intra-state earnings as so increased, to the inter-state earnings, thereby ascertaining what would have been earned by the actual expenditure in conducting both the intra-state and the inter-state traffic, had they been attended with the same relative cost; then ascertain what proportion of this total represents the intra-state earnings, as so increased, and then ascertain the corresponding proportion of the total cost of the intra-state and the interstate traffic. When this mode of apportionment is applied in these cases, the result shows that the earnings of each road from its intra-state freight traffic is much less than the proportion of the operating expenses and taxes properly attributable to it, and that the earning- of two of them from intra-state passenger traffic is a little less than the proportion of the operating expenses and taxes properly attributable to it. As to the other two roads the earnings from the traffic last named are somewhat in excess of the proper proportion of the operating expenses and taxes, but not enough so to yield a return of one per centum per annum upon that proportion of the value of the property rightly attributable to such traffic. So the conclusion necessarily follows that the rates in question, both freight and passenger, are non-compensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a using or taking of property of these railroad companies without due compensation, which is confiscation. This the Constitution of the United States does not permit, for it was said in *Smyth vs. Ames*, 169 U. S. 463, 526:

136 "1. A railroad corporation is a person within the meaning of the Fourteenth Amendment declaring that no State shall deprive any person of property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws.

"2. A state enactment, or regulation made under the authority

of a state enactment, establishing rates for the transportation of persons or property by railroad that will not admit of the carrier earning such compensation as under all the circumstances is just to it and to the public, would deprive such carrier of its property without due process of law and deny to it the equal protection of the laws, and would therefore be repugnant to the Fourteenth Amendment of the Constitution of the United States.

"3. While rates for the transportation of persons and property within the limits of the State are primarily for its determination, the question whether they are so unreasonably low as to deprive the carrier of its property without such compensation as the Constitution secures, and therefore without due process of law, cannot be so conclusively determined by the legislature of the State or by regulations adopted under its authority, that the matter may not become the subject of judicial inquiry."

It is pertinent in this connection to observe that in that case it was also said, p. 541:

"So far as rates of transportation are concerned, domestic business should not be made to bear the loss on inter-state business, nor the latter the losses on domestic business. It is only rates for the transportation of persons and property between points within the State that the State can prescribe; and when it undertakes to prescribe rates not to be exceeded by the carrier, it must do so with reference exclusively to what is just and reasonable, as between the carrier and the public, in respect to domestic business. The argument that a railroad line is an entirety; that its incomes goes into, and its expenses are provided for, out of a common fund; and that its capitalization is on its entire line, within and without the State, can have no application where the State is without authority over rates on the entire line, and can only deal with local rates and make such regulations as are necessary to give just compensation on local business."

But it is urged that a temporary injunction ought not to be granted because these railroads have heretofore applied and given effect to the rates in question, the contention being that a temporary injunction may be employed to preserve the status quo pending the suit but not to change it. It may be conceded that such an injunction is generally employed as stated, and that the Courts are generally reluctant to employ it otherwise, but this does not mean that they may not or ought not to employ it otherwise, when the exigencies of the case justly require it; for as has been often held,

courts of equity are not thus limited in their powers, but may
137 by a temporary injunction effect a change in the status quo, if it be necessary to do so, as here, to avoid irreparable injury from what is plainly a continuing wrong. In *re Lennon*, 166 U. S. 548, 566; *Chicago, etc., Co. vs. Winnett* — C. C. A. —, 162 Fed. 242, 249; *Prokegama Co. vs. Klamath Co.* 86 Fed. 528, 533, 535. It would hardly do to say to a railroad company that by resorting to the very best method of testing the adequacy of a prescribed rate, that is, by putting it into actual practice for a reasonable period, all right to a temporary injunction, which might otherwise

exist, will be lost; and yet that would be the result if the narrow view of the use of such an injunction here contended for were to prevail. True, some of the rates in question have been in force substantially in their present form for a considerable time, but enough of influence is accorded to this fact when it is made a reason for requiring stronger and more persuasive proof of inadequacy than otherwise would be required; and that influence has been accorded to it here. A temporary injunction will be granted as prayed for, but it will be required, for the protection of shippers and passengers, that a proper bond be executed in the sum of Two Hundred Thousand Dollars conditioned that the railroad company shall keep a correct account showing, as respects every carriage of freight or passengers, the difference between the tariff actually charged, and what would have been charged had the restrained rates been applied, and showing the particular carriage in question, the stations between which it occurred, and the name of the person affected, such record to be made and kept subject to the further order of the court; and also conditioned that the excess charged, with lawful interest and damages, shall be returned in each instance to the party entitled thereto within a reasonable date to be fixed by the Court, if it should eventually be determined that the temporary injunction ought not to have been granted.

138-369 Endorsed: Filed September 3rd, 1908. W. P. Feild, Clerk.

The following affidavits, on behalf of the complainant, were introduced and read at the hearing on the motion for a temporary restraining order:

(Omitted in printing per stipulation.)

370 And on September 12th, 1908, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

vs.

ROBERT P. ALLEN et al.

Comes the complainant, by S. H. West, Esq., its solicitor, and files herein its injunction bond in the sum of Two Hundred Thousand Dollars (\$200,000.00), with the United States Fidelity and Guaranty Company as surety, which bond is approved by the Clerk of this Court.

371 Which Injunction Bond is as follows:

In the Circuit Court of the United States within and for the Western Division of the Eastern District of Arkansas.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas; Henry Leigh
and George L. McLean, Defendants.

Injunction Bond.

Know all men by these presents, that the above Complainant, as principal, and The United States Fidelity & Guaranty Company, a corporation organized and existing under and by virtue of the laws of the State of Maryland, as surety, are held and firmly bound unto the United States of America in the penal sum of Two Hundred Thousand Dollars, (\$200,000.00), well and truly to be paid in lawful money of the United States, for the payment of which they bind themselves, their successors and assigns firmly by these presents.

Signed with our hands and sealed with our seals, and dated this 11th day of September, A. D. 1908.

This bond is made upon the following conditions, to-wit:—

372 Whereas, the Court in the above entitled cause, made an order on the 3rd day of September, A. D. 1908, granting a restraining order and providing among other things as follows, to-wit:

It is further ordered, that Complainant execute a bond to the United States of America in the penal sum of Two Hundred Thousand Dollars, conditioned that said Complainant shall keep a correct account showing, as respects every carriage of passengers and freight, the difference between the tariff actually charged and that which would have been charged had the rates inhibited hereby been applied, showing the particular carriage in question and the stations between which the same occurred, and the name of the person affected as far as may be practicable, which record shall be made and kept subject to the further order of this Court, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of the existing rates should not have been made, that said Complainant shall, within a reasonable time to be fixed by the Court, refund in every instance to the party entitled thereto, the excess of charge over what would have been charged, had the inhibited rate been applied, together with lawful interest and damages."

Now, if the above named Complainant, St. Louis Southwestern Railway Company, shall well and truly keep and perform all and singular the conditions of said restraining order, as above set forth,

373 then this obligation shall be null and void; otherwise to be and remain in full force and effect.

In testimony whereof, the above bounden principal has

caused its corporate name to be hereunto subscribed by its Vice-President, and its corporate seal to be hereunto affixed and duly attested, and said Surety has caused its corporate name to be hereunto subscribed and its corporate seal to be hereunto affixed by C. P. Perrie and D. H. Cantrell, its duly authorized attorney in fact for this purpose, the 11th day of September, A. D., 1908.

[SEAL.] ST. LOUIS SOUTHWESTERN RAILWAY
COMPANY,
By F. H. BRITTON, *Vice-President.*

Attest:

G. H. WARNER,
Assistant Secretary.

[SEAL.] UNITED STATES FIDELITY & GUARANTY
COMPANY,
By C. P. PERRIE,
D. H. CANTRELL,
Attorneys in Fact.

Attest:

— — —

Approved as sufficient, Sept. 12, 1908.

W. P. FEILD, *Clerk.*

Endorsed on back thereof: Filed September 12, 1908. W. P. Feild, Clerk.

And on October 5, 1908, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

Come the parties by their respective Solicitors and file herein their stipulation extending time in which to file replication to November rule day.

Which stipulation of Counsel is as follows:

It is agreed that the time for filing replications in the cases of Carle v. Chicago, Rock Island & Pacific Railway Company, Boyle v. St. Louis San Francisco Railway Company, — — — v. Kansas City Southern Railway Company, St. Louis, Southwestern Railway Company v. Allen, et al., and St. Louis, Iron Mountain & Southern Railway Company v. Allen et al., may be extended until December 1, 1908.

MORRIS M. COHN, *For Def'ts.*

Endorsed on back thereof: Filed Nov. 5, 1908. W. P. Feild, Clerk.

375 UNITED STATES OF AMERICA.
*Western Division of the
 Eastern District of Arkansas:*

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 20th day of October, Anno Domini, One Thousand Nine Hundred and Eight, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: February 4th, 1909.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN et al.

Come Morris M. Cohn and Rose, Hemingway, Cantrell & Loughborough, Esqs., and file herein their petition asking leave of the Court to withdraw their further appearance as Counsel for said Defendants herein, and the Court being sufficiently advised in the premises doth grant said petition, and said Solicitors are permitted to withdraw from this cause.

376 Which petition of Counsel is as follows:

In the United States Circuit Court for the Eastern District of Arkansas, Western Division.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN et al.

Come the undersigned and withdraw their further appearance for the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas; they no longer being connected with said causes as attorneys for said Defendants.

MORRIS M. COHN,
 ROSE, HEMINGWAY,
 CANTRELL & LOUGHBOROUGH.

Feb'y 4, '09.

Endorsed on back thereof: Filed Feb'y 4, 1909. W. P. Feild, Clerk.

And on February 18th, 1909, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Come the defendants, the Railroad Commissioners of the State of Arkansas, by Hal L. Norwood, Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., their Solicitors, and file herein their motion to dissolve the injunction heretofore granted herein.

Which motion to dissolve the injunction is as follows:—

377 In the United States Circuit Court for the Western Division
of the Eastern District of Arkansas.

No. 1636. In Chancery.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al., De-
fendants.

Motion to Dissolve Injunction.

Come the Defendants herein Robert P. Allen, John W. Crockett and John E. Hampton, constituting the Railroad Commission of the State of Arkansas, and move the Court that the temporary injunction herein granted by His Honor Willis Van Devanter, Circuit Judge, be not continued until the final hearing, or until the further order of the Court and that the same be dissolved, or, if in the judgment of the Court the injunction should be continued, that it be so modified as to give the Defendants and those they represent the equitable relief to which they are entitled. That the Defendants allege the following grounds for discontinuance of said injunction, to-wit:—

I.

That said injunction was improvidently granted, for these reasons, to-wit:—

(a) That the evidence of the Plaintiff, which sought to
378 sustain the allegations of the bill that the freight and pas-
senger rates were confiscatory, was based upon statistics of
six months' business of the Plaintiff Railroad Company and dur-
ing almost half of said period there was a financial and business
panic, when the industries and traffic all over the country, and par-
ticularly the State of Arkansas, were partially paralyzed and there
was a scarcity of money to move the crops and products, and a lack
of demand for coal, timber and manufacturing products. And since
the granting of said injunction the Supreme Court of the United

States has, on January 4th, 1909, said, in regard to a similar situation:

"We think it was error to confine the investigation to, and base the judgment upon, that year alone. The precise subject of the inquiry was, what would be the effect of the ordinance (referring to an ordinance fixing rates in the future. The operations of the preceding fiscal year, or of any other fiscal year, were valueless if the year was abnormal, and were only of significance so far as they foretold the future. If, as in this case, sufficient time has passed, so that certainty instead of prophecy can be obtained, the certainty would be preferable to the prophecy."

Had that Court made this utterance prior to the preliminary hearing herein, it is confidently asserted that His Honor, Judge Van Deventer, would not have granted the temporary injunction upon the evidence adduced based upon statistics of the operation of the Plaintiff's road during half of an abnormal year.

(b) The injunction was improvidently granted for the
379 further reason that it changed the status quo of the freight and passenger rates, which had long been in force, particularly the freight rates, and it is contrary to the principles of equity jurisprudence that a status quo be changed by a preliminary injunction. The facts in regard thereto are these, to-wit: The freight rates established by the Commission, which were enjoined, with the exception of a few changes made from time to time, which did not materially diminish the aggregate of the Plaintiff's income, had been in force on single lines since April 10th, 1900, and on two or more lines since July, 1903. And the reports made to the Commission by the Plaintiff, which it was required by law to make, showed that it made more money on its Arkansas business in the years 1906, 1907 and 1908, than it did prior to the promulgation of said tariff in April, 1900. That in said last three years the percentage of income to operating expense was steadily increasing. That the passenger rates had been put in effect by an Act of the General Assembly and the railroads had operated under same for a period of about sixteen months prior to the injunction herein, and said reduced passenger rates did not cause any material loss, if loss at all to the Plaintiff railroad company, as the increased travel without a corresponding increase in expense compensated for the reduced passenger fare.

Wherefore, said injunction, having been issued contrary to the established principles of equity jurisprudence, should not be continued, but should be dissolved.

II.

380 These Defendants assert that the filing of the bill in equity herein, seeking a temporary and permanent injunction, bound said Plaintiff to do equity, and, when said temporary injunction was granted restraining the enforcement of the passenger and freight rates upon the ground that said rates were unreasonable and confiscatory, the said Plaintiff was bound by the principles of equity jurisprudence, to put in force, if it exercised its power, only

reasonable rates, and it was not at liberty to avail itself of the injunction against the rates established under the law and put in force unreasonable rates. In violation of this settled principle of equity jurisprudence, the Plaintiff has, since the rates established by the Commission and the General Assembly were temporarily enjoined, established freight and passenger rates of all intrastate shipments and said freight and passenger rates are unreasonable and exorbitant and are destroying many of the industries of the State. And said Plaintiff is maintaining interstate rates so low that the same amount to a discrimination against the business and industries of the State of Arkansas. That it discriminates in favor of longer hauls of interstate shipments, under similar and like circumstances, against shorter hauls of intrastate shipments to the great detriment of the shippers and consumers of the State of Arkansas.

The tariff put in by the railroads since said injunction upon the leading articles of commerce in the State is an unreasonable increase. On grain there is an increase of 50% over the Commission rate; on cotton 140% over the Commission rate; on packing house products 100%, on coal, 35%, on brick, stone and sand, 75%, on lumber 107%, and on the various lines of merchandise about 75%.

There is an average increase on the principal commodities
381 of the State of 77% over the Commission rate, which these Defendants aver is unreasonable, extortionate and oppressive to the shippers of the State.

The Commission avers that its freight tariff as a whole is fair, compensatory and reasonable and this these Defendants expect to maintain by satisfactory evidence at the final hearing of this suit. And said Commission has, since the injunction by Judge Van Devanter, by proper action, after notice to the Plaintiff and all other railroads, putting in such unreasonable and exorbitant rates, after a hearing, declared said freight rates so established by the Plaintiff and the other railroads to be unreasonable. And these Defendants now submit with this petition many affidavits to sustain the action of said Commission in declaring the rates unreasonable, and to sustain the allegation herein that said rates are unreasonable, extortionate and discriminatory against the State of Arkansas and destructive and detrimental to the shippers of the State.

These Defendants allege that it is a principle of equity that detriment to the public is a consideration proper to be considered by a Chancellor when considering an application for a discontinuance of an injunction. That the Plaintiff has taken advantage of its injunction against the Commission and put in force unreasonable, extortionate and oppressive rates. Wherefore, having violated the spirit of the injunction obtained by it, the Plaintiff is not entitled to a continuance thereof, but, under the settled principles of equity, the same should be dissolved.

The Defendants further allege that in many instances the
382 unreasonably high rates established by the railroads since the temporary injunction herein has diminished the volume of traffic, and the Plaintiff itself is suffering a material loss of business from its destruction of the industries of the State, and, in

many instances, the injunction is injuring it as well as the shippers and consumers and industries of the State.

The Defendants allege that, after the injunction was granted temporarily restraining the two cent passenger rate put in force by the Act of the General Assembly, that the Plaintiff has increased the passenger rate to three cents per mile and has not afforded any better service while so doing. And the Defendants further allege that the *Defendant* is transporting all persons who buy 2000 mile tickets at two cents per mile, while requiring travelers who do not buy such mileage books to pay three cents a mile, and is thereby materially decreasing the amount of travel. The Defendants aver that the increase in travel at the rate of two cents a mile, except in abnormal years and in times of panic, will not cause any loss to Plaintiff or any other trunk line in the State of Arkansas, as the increased travel on account of the reduced rate will compensate for the loss in rate, and if the Plaintiff gives said two cent passenger rate a fair test, as it has not done, the same will prove to be true. The Defendants further allege that neither the Plaintiff nor these Defendants are able to state the exact effect of the two cent passenger rate, and there has been no fair test of it under the principles established by the Supreme Court of the United States, as it is a matter of prophecy
383 and not of fact as to the effect of same, and, according to the decisions of that Honorable Court, in such a case the Plaintiff is not entitled to a temporary or permanent injunction until it has fairly tested said rate and found the same confiscatory so long a length of time that the future can be foretold by its past operation.

III.

If in the better judgment of the Court, it is found that Plaintiff's violation of the spirit of the injunction, does not entitle the Defendants to its dissolution, then the Defendants allege that those they represent are entitled to have the injunction continued only upon terms which would be equitable to the Plaintiff and to the interests represented by the Commission, said terms being that the Plaintiff be enjoined from enforcing its existing rates, where shown to be exorbitant and unreasonable, and that it be enjoined to put into force fair and reasonable rates pending the determination of this litigation over the rates enjoined by it.

IV.

The Defendants allege that the Plaintiff has a plain and adequate remedy against any rate established by the Commission which is not reasonable and compensatory and should not be entitled to seek a remedy in a Court of Equity until it has exhausted its efforts to obtain a reasonable and compensatory tariff under the existing law, which affords it ample and complete redress against any injustice in the freight rates established by the Commission. That it is made the duty of the Commission—

384 "to hear all complaints made by any person, firm or corporation against any such tariff or charges so approved (by it); to hear the parties to the controversy in person or by attor-

ney, or both, and may take testimony orally and in writing, and regulate the argument thereon and conduct the investigation of such complaints in such manner as to the Commission may seem best to arrive at the truth, and when any changes are made in the tariff notice thereof shall be given to the person or corporation to be affected thereby."

And it is further made the duty of the Commission in changing or fixing the rates, to take into consideration the character or nature of the service to be performed, the entire earnings of the railroad, the expense of operating same and the expense and value thereof. And the Defendants assert the facts to be that when the first tariff was established by the Commission, in 1900, that it assured the Plaintiff and all other railroads affected by it that, if said tariff did not produce a fair profit, the Commission, upon a showing so made, would readjust it so as to produce, if possible, for the Plaintiff, a fair profit upon its investment. And such has been the attitude of the Commission from then until the present time, and is still the attitude of the Commission. That several small line railroads have applied to the Commission for relief against the existing rates, and, where the showing has been made of the justice of the application, the Commission has granted the same. That the Plaintiff has not presented any complaint to the Commission, alleging that any rate, or the tariff as a whole, established by it was not compensatory and asking for an increase of any rate or of the tariff as a whole.

385 That the Commission recognizes now, as it has always done, no tariff, whether promulgated by a railroad or a Commission, as perfect, and that all tariffs should be changed from time to time to meet changed conditions in order to do justice to the railroads or shipper, as the case may be, and this the Commission has at all times been ready to do whenever satisfactory evidence should be offered to it showing the justice of and necessity for same.

The Defendants assert that the temporary injunction should not be continued until the Plaintiff has availed itself of its legal right to obtain redress of its alleged grievance, in so far as the freight rates are concerned, before the Commission, and alleges it is contrary to the principles of equity to entertain a suit where full and adequate remedy at law is open to the Plaintiff; that it is contrary to the comity which federal courts extend to state tribunals to grant relief in said federal courts against state regulations promulgated under state laws, until the Plaintiff has sought its constitutional right in the tribunals where the alleged unconstitutional regulation is attempted to be enforced.

The Defendants allege that they are called upon to defend in this court the rates of their predecessors and maintained by themselves, with a few changes as called for from time to time, without having had an opportunity to hear the complaint of the Plaintiff and pass upon its justice.

Wherefore, the Defendants pray that the injunction be discontinued or its operation suspended until the Plaintiff applies for redress before the Commission and gives it an opportunity to pass upon the matters which are alleged in Plaintiff's complaint.

The Defendants allege that the Plaintiff's case is predicated upon the relative cost of intrastate over interstate traffic, and that the method of computing intrastate traffic is one upon which railroad accountants differ. The General Auditor of the Plaintiff, in his affidavit filed in this case, has testified:

"There is a diversity of opinion among railroad officials and the accountants who deal with the accounts of railroad corporations as to how expenses should be divided between the two classes of service, intrastate and interstate. For operating purposes the train mile, car mile and ton mile are often used as units to determine the division of freight service and freight cost."

Said Auditor asserts that the revenue basis is the proper one, but competent and equally skilled accountants assert that it is not the true basis but the ton mile basis should control. This difference of opinion is one of the issues to be determined in this suit, and if the ton basis is established to be the proper basis, then, under the evidence submitted by the Plaintiff as to its gross earnings, operating expenses and value of its property, the Commission's tariff is providing it a large revenue and affording a fair compensation upon its investment. That it is contrary to the principles of equity that a temporary injunction should change the status quo where the matter to be litigated is gravely doubtful and upon such gravely doubtful contention the Plaintiff's whole case is predicated. When

an injunction is granted against a rate fixed by law as violative of constitutional right, the invalidating facts must be proved to the satisfaction of the Court and not merely rest upon a difference of opinion among expert accountants.

VI.

If the injunction in whole, or modified so as to require the Plaintiff to do equity while this litigation is pending by establishing reasonable rates, is continued, then the Defendants pray that it be further modified so as to afford the interests they represent adequate relief, in the event that the Defendants are ultimately successful, in the following particulars:

(a) The bond required of the Plaintiff is wholly inadequate to cover the losses to the interests represented by this Commission, to-wit: The shippers and passengers of the State. And the Defendants allege the facts to be, taking the increased rate of 33 $\frac{1}{3}$ % on passenger traffic, established by the railroads, and applying said increase to the passenger traffic of the six months for which the Plaintiff furnished statistics, the increased revenue to the Plaintiff on the passenger business would amount to \$557,694.80 per annum. From this gross sum should be deducted the amount of travel that the Plaintiff still permits to be had at two cents a mile, the exact amount of which is not known to these Defendants. Taking the statistics for the six months freight business furnished by the Plaintiff and applying to it the increase of 75% (which is really less than the true increase) an increased revenue of \$960,375.24 is produced. From this should

be deducted the loss of business to the Plaintiff from its destruction of the various industries that are not now, under its high tariff, shipping the commodities, which they would otherwise have shipped. The Defendants allege that these calculations, based upon the statistics of the Plaintiff, show that a bond of \$200,000.00 is wholly inadequate to protect the people who are paying the extortionate and unreasonable rates, in the event that the Plaintiff does not finally prevail in this case, and that such bond should be required as will protect such interests.

(b) That the injunction herein requires the Plaintiff shall keep a correct account showing, as respects every carriage of passengers and freight, the difference between the tariffs actually charged and that which would have been charged had the rates inhibited been applied, showing the particular carriage in question and the stations between which the same occurred and the name of the person affected, so far as may be practicable, and that Plaintiff keep a record of the same subject to the order of the Court, and conditioned to refund the excess should the injunction not be finally sustained. These defendants allege that said requirement is not ample to secure the shippers and passengers, and pray that, should the injunction be continued, the plaintiff be required to furnish to each passenger and to each shipper a certificate or coupon showing the excess payment over the rates enjoined, so that said passenger or shipper would have prima facie evidence of the amount due him from the plaintiff should the Plaintiff not ultimately succeed herein.

And these Defendants further assert, upon information and belief, that the Plaintiff is not keeping such an account as is required by the injunction, and pray that it be required to file an account showing the excess of freight and passenger fares collected by it over the rates enjoined, and from whom such freight and passenger fares have been collected, to the end that the rights of all parties interested may be protected.

And these Defendants pray for all further relief which the Court may find in equity and good conscience they and those they represent are entitled to receive.

_____,
Attorney General;

_____,
Counsel for State.

We, Robert P. Allen, John W. Crockett and John E. Hampton, state on oath that we verily believe the matters set forth in the foregoing petition are true.

Sworn to and subscribed before me this 17th day of February, 1909.

Endorsed on back thereof: Filed Feb'y 18, 1909. W. P. Feild, Clerk.

390 UNITED STATES OF AMERICA,
*Western Division of the
Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 5th day of April, Anno Domini, One Thousand Nine Hundred and Nine, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: June 1st, 1909:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN et al.

The Court being now sufficiently advised as to what disposition to make of the motion to modify the temporary injunction heretofore granted in this case, and which was submitted at a previous day of this term.

It is ordered, adjudged and decreed that, in addition to the conditions upon which the temporary injunction was granted herein, the following conditions be and they are hereby prescribed by the Court:

That from the affidavits and evidence submitted, the Court finds that the tariff of freight charges put into effect by the said Railway Company since the granting of the temporary injunction is unreasonable, and, therefore:

It is ordered that the freight rates pending this action, to be charged by the said railway company shall be so arranged as to produce a net increase of thirty three and one third per cent ($33\frac{1}{3}\%$) of the revenue produced by Standard Freight Distance Tariff (No. 3) Number Three, put into effect by the Defendants, State Railroad Commissioners, and in force at the time the temporary injunction was granted; and that the same be put into effect not
391-421 later than June Seventh (7th) 1909, and continue in force until the further order of the Court with leave to either party to apply to the Court for a modification of said tariff, if it shall be found that it does not conform to the order of the Court in respect to the aforesaid increase in the revenue of the said Railway Company.

And thereupon come the Plaintiffs and file a tariff of freight rates which both parties believe conform to the order of the Court, and said tariff is ordered to be filed marked Exhibit "A" to the decree modifying the temporary injunction and made a part of the record in this cause.

It is further ordered that the security given by the said Railway Company upon the granting of the preliminary injunction herein shall in no wise be affected by this order, but shall remain liable in the same manner for the rates charged under the tariff promulgated under this order of Court as if this order had been embodied in the order granting the preliminary injunction; and a failure to comply

with the schedule herein filed shall be cause for dissolution of the temporary injunction.

(Signed)

JACOB TREIBER, *Judge.*

Which Exhibit "A" is as follows:

(Omitted in printing per stipulation.)

422 And on the same day the following opinion of Court was filed:

In the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas.

IN RE ARKANSAS RAILROAD RATES.

John M. Moore, Buzbee & Hicks, Reid & McDonough and B. R. Davidson, for Complainants.

Hal L. Norwood, Attorney General, Joseph M. Hill, James H. Harrod and William F. Kirby, for Defendants.

On Motion for Modification of Preliminary Injunctions.

TREIBER, *D. J.*:

Upon application for a temporary injunction made by the railroads of this State, and heard by Judge Van Deventer, one of the Circuit Judges of this Circuit, preliminary injunctions were granted restraining the enforcement of the intrastate rates then prescribed by the Railroad Commission of the State of Arkansas, for the transportation of freight and the two cents a mile passenger Act of the General Assembly of the State of Arkansas, approved February 9, 1907, the contention on the part of Complainants being that they were unreasonable, non-compensatory and confiscatory. At that hearing the learned Judge found from the evidence submitted that the additional cost of intrastate traffic exceeds that of the interstate of the complaining roads one hundred per cent on freight, and fifteen per cent on passenger traffic, and applying this rule to the earnings of the roads and their values decided that, "the rates in question are non-compensatory and unreasonable, and that their enforcement, although not so intended, is nothing other than a taking of the property of the railroad companies without due compensation, which is confiscation." The opinion on that hearing will be found in 163 Fed. 141.

The State Railroad Commission now applies for a modification of these temporary injunctions, alleging, that, "Since the granting of the preliminary injunction the railroad companies have established freight and passenger rates on all intrastate business, which are unreasonable and exorbitant and are destroying many of the industries of the State." It is charged that the passenger-rate has been raised to three cents a mile, and the freight tariffs put into effect, increased those prescribed by the Commission and in force

at the time the temporary injunctions were granted, as follows: 50% on grain; on cotton 140%; on packing house products 100%; on coal 35%; on brick, stone and sand 75%; on lumber 107%, and other various lines of merchandise, about 75%; that the average increase on the principal commodities of the State on a revenue producing basis is over 77%, which rates it is claimed are unreasonable, extortionate and oppressive to the shippers and consumers of the State. It is, therefore, asked that the preliminary injunction be modified so as to prevent this injustice.

That a preliminary injunction may be modified at any time whenever the ends of justice require it is beyond question. Not only may it be done by the trial court, but upon appeal by the appellate tribunal. *Denver and Rio Grande R. Co., vs. United States*, 124 424 Fed. 156, 59 C. C. A. 579. Judge Sanborn, who delivered the opinion of the Court in that case said that, "a preliminary injunction may be modified when by such modification the injury or inconvenience of one or more of the litigants may be decreased without increasing the danger of loss to their opponents." And, accordingly, he modified the temporary injunction which had been granted by the lower Court. There can be no doubt that a temporary injunction can not be claimed as an absolute right, but is within the sound discretion of the Court, that discretion of course, to be controlled by the established principles of equity jurisprudence. *Shubert vs. Woodward*, 167 Fed. 47, — C. C. A. —. In the head note of that case, prepared by the Court, it is said, "the specific performance of contracts and the issuance of injunction are not matters of right; they rest not in the arbitrary or whimsical will, but in the judicial discretion of the Court, informed and guided by the established principles, rules and practice in equity, which are advisory rather than mandatory;" see also *New York City vs. Pine* 185 U. S. 93, 22 Sup. Ct. 592, 46 L. Ed. 820. *Kansas vs. Colorado* 206 U. S. 46, 27 Sup. Ct. 655, 51 L. Ed. 956.

Granting or refusing a preliminary injunction proper regard must be had for the comparative injury which will be sustained by the defendant if the injunction were granted, and by complainant if it were refused, and in order to prevent great injury to the Defendant when the complainant is *prima facie* entitled to a temporary injunction, the Court, in the exercise of its discretion, frequently resorts to the expediency of imposing terms and conditions upon the parties at whose instance it proposes to act. *Russell vs. Farley*, 105 U. 425 U. 433, 438, 442, 26 L. Ed. 1060; *Myers vs. Block*, 120 U. S. 206, 214, 7 S. Ct. 529, 30 L. Ed. 644; *Ewing vs. Filley*, 43 Pa. St. 384, 387; *Denver & Rio Grande R. Co. vs. United States* 142 Fed. 625, 73 C. C. A. 621; *Vogel vs. Warsing*, 146 Fed. 449, 77 C. C. A. 109; *McElroy vs. Kansas City*, 21 Fed. 257, 264, 263 (C. C.); *McCaul vs. Braham*, 16 Fed. 37, 42 (C. C.); *Spring Valley Water Co. vs. San Francisco*, 165 Fed. 667 (C. C.); *Macon R. R. Co. vs. Gibson*, 85 Ga. 1, 11 S. E. 442; *Careton vs. Rugg* 149 Mass. 550; *Kerr on Injunction* (2nd Am. Ed. 30); *Spelling or Injunction*, p. 1031-1033. The authorities cited by Counsel for Complainants

all refer to permanent, and not preliminary injunctions and for this reason are not applicable to this proceeding.

In *Denver & Rio Grande R. Co. vs. United States*, supra, it was said that, "The purpose of a preliminary injunction is to protect and preserve the rights of all the litigants with the least injury to each until the controversy between them can be tried and finally decided."

In *Spring Valley Water Co. vs. San Francisco*, supra, the question before the Court was the terms upon which a preliminary injunction should be granted against the enforcement of an ordinance fixing water rates to be charged by Complainant. Judge Farrington, in a very exhaustive and learned opinion held that,

"This Court can not control the discretion of the supervisors; it can not substitute its judgment for theirs. The power and duty of fixing water rates is cast by the Constitution on that board and not on this Court. The law no where provides an appeal to this Court from an ordinance adopted by the Board of Supervisors, nor does it clothe this tribunal with any authority to review, revise, correct or send back to that body for reconsideration an ordinance establishing the compensation to be collected for water."

* * * It would seem, therefore, that the Court is limited to the determination of a single question, namely, is the ordinance confiscatory?"

And coming to the question of a preliminary injunction the learned Judge says: "It is an abuse of judicial discretion to issue an injunction which will permit one party to obtain any advantage by acting, when the hands of the adverse party are tied by the writ."

From these authorities it may be stated that a Court, when called upon to grant a preliminary injunction, may impose such terms, on granting it, as will protect the rights of the defendant as well as those of the complaining party, and if, after the temporary injunction has been granted, and before a final hearing while it is in force, it is shown to the Court that great injustice is being done by reason thereof, that the acts of the plaintiff are unjust, oppressive and unkind of the rights of the defendant, the Court may modify it by imposing terms which will prevent such injustice.

This leaves for determination another very important matter. Can the Court, for the purpose of requiring the complainant, who obtained the preliminary injunction, to do equity and preventing the imposition of extortionate rates for the carriage of freight and passengers, fix maximum rates beyond which complainants must not go during the pendency of the litigation, and make a compliance with these rates a condition upon which the temporary injunction will be continued? That the making of carrier's rates is a legislative act and not judicial is frankly conceded by Counsel for the Defendant, and for this reason Courts are powerless to make them. Upon final hearing the Court must, if it is shown that the Commission rates are compensatory, within the meaning of the law, dissolve the preliminary injunction or make it perpetual if they are found to be non-compensatory, and therefore confiscatory.

The authorities are not only numerous but harmonious on this subject. A few of the leading and late cases is all that is necessary to cite on the subject. *Reagan vs. Farmer's Loan & Trust Co.* 154 U. S. 362, 400, 14 S. Ct. 1054, 38 L. Ed. 1014; *Interstate Commerce Commission vs. Ry. Co.* 167 U. S. 479, 499, 505, 17 S. Ct. 896, 42 L. Ed. 242; *Prentiss vs. Atlantic Coast Line*, 211 U. S. 210, 226. But when the application is for a temporary injunction the rule is different. As was said in *Spring Valley Water Co. vs. San Francisco*, supra:

"While it appears that the ordinance in question is probably confiscatory and therefore invalid, the fact that complainant will suffer irreparable injury unless an injunction issues is not decisive. The Court owes equal consideration to both parties; it must not issue an injunction which will do more harm to one party than good to the other; it should so preserve the matters in dispute as to protect each party as far as possible from harm. We have no means of knowing the plans of the company, whether it will raise the rates for the remainder of the fiscal year to the full amount of what is alleged to be reasonable—that is, so as to realize an income of more than \$3,000.00 net—or whether it will be content with something less. If the ordinance is finally adjudged valid, any collections made in excess of the rates specified therein must
428 be repaid. Such repayment can be secured by a proper bond; but if the ordinance is adjudged confiscatory and therefore invalid, there is no practicable remedy for the consumer, who, under the necessity of agreeing to the terms offered by the company or foregoing the use of water, contracts to pay and does pay more than is just. His injury is irreparable. It is not sufficient to say that Courts will enjoin the unreasonable charges, or that this Court will promptly dissolve the injunction, if, pending the suit, complainant abuses the process of the Court. Whether the rates so fixed by the company are reasonable or unreasonable is a question of fact which no court would presume to decide without a hearing, and such a hearing may be long and expensive. Most consumers will consider water of any quality or price cheaper than litigation. Neither conception of the status quo is satisfactory. Neither, if maintained, will afford adequate protection but to one party. If the ordinance is confiscatory, complainant is entitled to an additional sum which will make its compensation just and reasonable. This sum will be lost to complainant if the injunction is denied. On the other hand, if the ordinance is confiscatory and the injunction is granted as prayed for, if complainant exacts a compensation in excess of what is just, the excess will be lost to San Francisco and its inhabitants. Equity, however, has no peculiar concern for the status quo, except that its preservation usually, if not always, accomplishes that which is the object of a preliminary injunction; that object is to preserve the fund, the property, the right or other thing in dispute, from waste, destruction or disturbance until the rights and equities of the contending parties can be finally considered and determined. Notwithstanding
429 the fact that the ordinance is probably confiscatory, and that its enforcement should be restrained pending suit in order

to save complainant from irreparable injury, and interlocutory injunction, the effect of which is to give complainant the authority, practically without limit, to fix prices at which it will sell water, must be denied for the following reasons." He then proceeds to state the reasons which it is unnecessary to repeat here.

The effect of the preliminary injunctions is to leave the State without any regulating freight rates (it is otherwise as to the passenger rates as the statute in force at the time of the enactment of the Act of 1907 limiting them to three cents a mile is undoubtedly effective if the later Act is void. *Railway Co. vs. State*, 86 Ark. 363) and leaves the railroads without any limitation, so far as the laws of the State of Arkansas are concerned, to make them what they deem proper until the final determination of these causes. Assuming from the figures presented by the Complainants, and as found by Judge Van Devanter, that the rates enjoined are confiscatory or at least not sufficiently remunerative, the injunction, if the evidence at the final hearing is the same, would have to be made perpetual. In that event the rates collected during the pendency of these actions, no matter how excessive and unreasonable, and until the Commission can make new rates, rates sufficient to enable the roads to earn a reasonable compensation, will be wholly lost to the shippers. It is true, the preliminary injunction specially provided that, "Nothing recited in this order shall operate to prevent the said Railroad Commission of the State of Arkansas from establishing and enforcing any reasonable, compensatory and lawful rates, in place of those whose enforcement is hereby inhibited." But it is not very probable, nay almost certain that any rates which may be proposed by the Commission, if less than those rates put in effect by the Complainants, which they claim are as low as they can make them, will cause further litigation, as supplementary bills would be filed to enjoin them as confiscatory. Of course, the Court could refuse to grant the injunction if the rates were not shown to be confiscatory, but in order to do that the Court would necessarily have to determine what rates were compensatory and just, and in all likelihood from evidence identical with that submitted at this hearing. As the Railroad Commission contends, and no doubt every member thereof believes, that the rates now enjoined were compensatory or if not that a very slight increase would make them so, the probabilities are that a number of suits would have to be filed by each of the railroads until a tariff would be prepared which would justify the Court, acting upon the basis of apportionment of expense made in this case, and which will not be disturbed before there is a final hearing, if then, to refuse a preliminary injunction. In the meantime the rates, although they may be unjust and oppressive, would be collected.

Therefore, to prevent not only a multiplicity of suits, but to require complainants who seek equity do equity, this Court is justified in prescribing such maximum rates as may be just to the railroad as well as the public. In *Spring Valley Water Company vs.*

San Francisco, *supra*, Judge Farrington found that complainant would probably be entitled to a gross income of \$266,675.60 in excess of that afforded by the rates fixed by the supervisors, and thereupon he held that complainant was entitled to so much relief
431 but no more and granted the preliminary injunction upon that condition.

It is true that in the San Francisco Water Company case there were only a few rates to be fixed while in these cases hundreds of different rates must be determined. This may necessitate a great deal more labor and may require the assistance of a special master, if the parties are unable to reach an agreement under the directions and instructions of the Court, if the Court finds that the rates put in force by the railroad companies since the granting of the preliminary injunctions are so exorbitant as to be unjust and oppressive. But this ought not to prevent the Court from doing justice and preventing a wrong. The difference is only one of degree and not of principle. If it appears from the evidence that the rates now in force are unreasonable, enabling Complainants to increase their earnings on intrastate rates to a much greater extent than is necessary to enable them to make a reasonable return on their investment, great damage will necessarily be sustained by the public who pay these rates, for some of which there can be no redress, even if the injunction should be dissolved. For the Court to refuse to act in such a case would be an injustice which no Court of equity should ever be guilty of. The bond executed by the railroad companies and the provisions made by the orders granting the preliminary injunctions, providing for an ascertainment of the damages, will only become effective if, upon final hearing, the injunctions are dissolved, but if it should appear upon that hearing that the rates while compensatory to some extent are still not sufficient to enable complainants to earn as much as in the opinion of the Court
432 they are lawfully entitled to, the injunction would have to be made perpetual, although a small increase of the rates from five to ten per cent would be sufficient to have made the rates compensatory within the meaning of the law. In such a case no recovery could be had by the Defendants, even if it should appear that the increase in the rates during the pendency of the temporary injunction exceeded one hundred per cent. And even if the injunction should upon final hearing be dissolved, the only damages which the law would permit to be recovered would be the difference between the rates paid under the increased tariff schedules and what would have been paid under the rates enjoined. In the meantime industries may have been prostrated and wholesale houses driven from the State, because, owing to the high rates in force during the pendency of these proceedings, they are unable to maintain their trade in competition with others located outside of the State and enjoying the benefits of lower interstate rates.

At the hearing of this application a great deal of testimony was introduced tending to show not only the extent of the increase of rates since the preliminary injunctions have been granted, but it was also shown that interstate rates from points outside of this

State on business competitive with that of the business men of this State have not been increased. It appears from these affidavits that some branches of business have been practically suspended so far as intrastate business is concerned by reason of the fact that the lower rates given to competitors doing business in other states prevented them from being able to deliver to retail dealers in parts of this State their articles of manufacture at the same prices. It is true the railroads claim, and no doubt justly, that although the new intra-

state rates have been in force for over five months, and no
433 changes in interstate tariffs have yet been made, they will soon put them in effect and they will be as high as those now in force on intrastate business; they claim that the changing of these tariffs requires a great deal of time; that the last few months have been the busiest of the year, and that under the interstate commerce law, before new interstate rates can become effective, they must be filed with the Interstate Commerce Commission thirty days. The Court has no doubt that these statements are true, and that these complainants do not intend to discriminate against the people of this State whose welfare is necessary to their own existence; still the injury has been, and is still, being inflicted. While these facts would not be sufficient to justify this Court in declaring the rates exorbitant and unjust, they are circumstances which would be taken into consideration, not so much for the purpose of determining whether their present tariff is exorbitant as for the purpose of determining the propriety of the Court, sitting as a Court of equity, to exercise its power to prevent injustice to and oppression of the people of the State if the proofs show that it is being done.

This hearing was had on ex parte affidavits, testimony which can never be said to be conducive to obtaining exact facts, still as the most important testimony is based upon documentary evidence, the tariffs in force at the different times, and the income and expenditures of the roads, it is comparatively easy to ascertain the effect of these new rates.

On the part of the Railroad Commission comparative statements of the freight rates in force when the bill was filed and those
434 put in since the granting of the preliminary injunctions, and which are conceded to be correct, were introduced. These indicate that some rates have been raised over 200 per cent, and the average increase in the freight rates on a revenue basis, it is claimed, exceeds 77 per cent. On the other hand it is claimed by the railroad companies that some of the rates of the Commission were absurdly low, and that the increase of the new rates, as shown by the earnings for the month of November, 1908, the first month the new rates went into effect (for one of the roads it is based on the earnings for the months of November and December, 1907) the increase is as follows:

St. L. I. M. & S. Ry. Co., 41.80%.

St. L. & S. W. Ry. Co., 41.59%.

C. R. I. & P. Ry. Co., 24.95%.

St. L. & S. F. Ry. Co., 17.77%.

K. C. Southern Ry., 38.31%.

or an average of the five roads of 36.75% These calculations are based on the actual sums collected, compared with what would have been collected upon the basis of the rates enjoined. No doubt this is the most satisfactory, if not the only correct basis, for ascertaining, on a revenue basis, the actual increase of the rates, especially as these actions are based solely upon the ground that the Commission rates were so low as not to earn anything on the investment of complainants. But, can it be said that the business of one, or even two months, especially the first, after the new increased rates went into effect, is a proper criterion for the ascertainment of these facts. It is urged that during the winter months the rates which were raised the highest, fruit and vegetables, on which the average raise is from

one hundred to two hundred per cent; grapes nearly three
435 hundred per cent; seeds from one hundred fifty to two hundred per cent; lumber, the largest tonnage commodity of

the State, over one hundred per cent, do not move extensively during the months of November or December; and in addition thereto it is claimed, and so shown by the affidavits of a number of merchants, that immediately after notice had been given of the new rates, and for the several weeks before they went into effect, a great many merchants purchased all their goods on which the increase of rates was material, and had them shipped to their places of business, so as to obtain the benefit of the lower rates. These statements seem reasonable and fair; but, in any event, it is hardly reasonable, in view of the large variety of products in this State to take the business of any one or two months for the proper standard for the year's business. That is fully shown by the fact that the revenue increase on a percentage basis of the different roads varies greatly; while the St. L. I. M. & S. R. R. Co., and the St. Louis Southwestern Ry. Co., report an increase of nearly 42%, the St. L. & S. F. Ry. Co., shows an increase of only 17.77%, and the Rock Island Railway an increase of less than 25%. No doubt the fact that the industries, as well as the products, mineral, forest and agricultural, along the line of the latter roads are different from those of the other roads, accounts for this difference. The fact that 40% of the entire tonnage of the intrastate business of the State is that of lumber and forest materials, for which the tariff has been raised over 100%, is of itself sufficient to show that the business for the months of November and December would hardly be proper tests for the business of the

railroads of the State for the year, for there are hardly any
436 months during the year in which there is less building material used than during those months. In addition to this,

it must not be overlooked that the rates are not raised horizontally, but run from 3% to over 200%. Defendants have submitted some calculations based on a large number of freight bills, paid during the five months the rates have been in force. These show an average increase on a revenue basis of over 77%. But they can not be accepted as a proper test for several reasons. It has been shown that these bills constitute but a little over 1% of the freight earnings during that time, and there is nothing to show that these bills cover those rates which have been but slightly raised, say from 3% to 20%,

as well as those which were increased greatly. The probabilities are that shippers would pay but little attention to small increases and furnish only such bills as indicated what they considered excessive rates. Taking the two tariff sheets, those in force at the time the injunction was granted, and those now in operation, with the percentages of increases as figured out by the experts of Complainants, and admitted by defendants to be correct, it is reasonable to say that the increase will exceed on a revenue basis considerably over 50%.

On behalf of the complainants it is also claimed that these large increases are based on the Commission rates which were much lower than the rates in force before the Commission was created, and the tariff then in force is offered in evidence to show that the present rates are but slightly, if any, in excess of those then in force. The tariff sheet offered is that of the St. Louis, Iron Mountain & Southern Railway Co. 1508-A, but it is shown that that tariff was only
437 nominally in effect; that the real tariff was Number 3315, called the "Jobber's Tariff" on which most of the freight traffic was carried, and in addition to this, there were special rates for almost every commodity in the State and that only a few of the small shippers who were ignorant of the tariff schedules were charged rates under 1508-A; that the Commission tariffs were but slightly lower than tariff Number 3315, and higher than many of the special tariffs in force at that time.

As to the special tariffs, the Court is satisfied from the evidence that they were made very low, in many instances below the cost of carriage, for the purpose of aiding in the establishment of new industries along the lines of railroads, and by these means build up the country, and thus, indirectly, increase the business and earnings of the trade. Such rates, which were not illegal at the time, can not be considered as a fair test for the purpose of determining what would be compensatory rates. That the Commission did make material reductions, even from the "Jobber's Tariff," No. 3315, has been fully established, but it is doubtful whether they amounted to as much as twenty per cent, although the Commission in its first report, claimed credit for having made reductions exceeding thirty per cent. But in considering this claim of the Commission, the Court is satisfied that in making it they were influenced by the fact that many of the large shippers who had theretofore enjoyed special rates, and which were lost by the acts of the Commission, which prohibited discriminations, had attacked the acts of the Commission and were urging the repeal of the statute creating it. A twenty per cent reduction is a liberal estimate for the tariff of the Commission.

On the part of the Defendants it is also urged that these
438 rates had been in force for eight years without any complaint on the part of the railroads, or any effort to restrain them, and for this reason it is claimed a strong presumption arises that they were not only not confiscatory, but were just and fair. It is true that in the absence of any proof, such acts of the railroads would raise a strong presumption that the rates were compensatory, a presumption as strong as that rates made by legislative authority are

fair and reasonable; still, it is only a presumption and may be rebutted. For that purpose it has been shown that the Commission rates were only submitted to under vigorous and continuous protests, and after it had been fully established by fair trial that these rates were confiscatory did the railroad companies feel justified in invoking the aid of the Courts to prevent what they consider a great injustice to them. In addition to that, it has been shown that since then there has been a continual increase in the operating expenses of the railroads in this State. The taxes have been more than doubled since the Commission first established its tariff; the cost of materials necessary for the operation of the trains and maintenance of the tracks, has increased largely; wages of all employ  s have been raised very materially; the legislation of the State, while no doubt prompted by the best motives, for the purpose of protecting the lives and property of its citizens, has greatly increased the operating expenses of all railroads in this State. The fellow servant rule of the common law has been abolished; railroads are made liable for all losses sustained by fires caused by sparks from locomotives, regardless of any question of diligence or negligence; the hours of labor of some of their employ  s have been shortened by statute; additional

439 brakemen are required for freight trains; every locomotive is required to be provided with powerful electric headlights; many new stations have been established; in some of the cities through which the roads run, they have been required to erect viaducts over some of the streets to prevent injury to persons using these streets; heavy penalties have been prescribed to secure prompt payment of wages of employ  s; and many other matters deemed necessary for the protection of property and the lives and comfort of the public are now prescribed by statute which were not required eight years ago. All of these add very much to the financial burden of these companies. These facts must, of course, be taken into consideration for the purposes of determining what rates are compensatory. As stated by this Court in *Kansas City Southern Railway Company vs. Board of Railroad Commissioners*, 106 Fed. 353, 358 (affirmed in 187 U. S. 617), in speaking of such additional expenses necessarily incurred by reason of the enactment of such laws by the different states and perhaps in consideration of these additional burdens imposed on railroads, it (the State) may allow a greater charge for the transportation of passengers as well as freight through its territory than neighboring states in which no such burdens are imposed."

That the large increase in their business caused by the development of the natural resources of the State, as well as the rapid growth of its population; the use of improved machinery and rolling stock; the improved condition of the road beds after they are used for a number of years, enable the companies to carry freight, as well as passengers at a lower rate than formerly can not be doubted, but proofs now before the Court would hardly justify a finding that

440 there has not been some increase in the cost of the operation of trains in this State within the last few years, since the Commission rates went into effect, increases which were gradual but continuous.

Giving due weight to these facts, the next inquiry to be made is

what rates would enable them to earn reasonable returns on their investments? So far as the passenger rates are concerned, it is, of course, easy to ascertain the increase, as the rate was raised from two cents to three cents a mile, an increase of fifty per cent; but, it is claimed that in view of the reduced rates received from the sale of mileage books, and the reductions usually offered to the public as excursion rates, when it is sought to attract large crowds for certain occasions, usually of a public nature, and reduced rates furnished to ministers of the Gospel, the actual increase in the gross receipts on passenger rates is only about thirty-five per cent.

A three cent a mile rate in view of the fact that, comparatively speaking, this State is but sparsely settled and that there are no large cities in it, is not so unreasonable that the Court would feel justified upon the showing made by the roads, indicating a considerable loss on its intrastate passenger traffic, while the two cents a mile rate was in force, to disturb it while these proceedings are pending. Besides it is well settled that for the purpose of determining whether rates are confiscatory or not, all sources of revenue must be considered. *Minnesota & St. Louis R. R. Co. vs. Minnesota*, 186 U. S. 257, 22 S. Ct. 900, 46 L. Ed. 1151; *Seaboard Air Line Co. vs. Florida*, 203 U. S. 261, 27 S. Ct. 109, 51 L. Ed. 175; *Atlantic Coast Line R. R. Co. vs. North Carolina Corporation Commission*, 206 U. S. 1, 27 S. Ct. 585, 51 L. Ed. 933.

441 The increased earnings from one class of traffic will, therefore, justify a corresponding decrease in another class, if the net earnings from all sources are compensatory. For this reason, if the net earnings on passenger traffic are larger, that fact would be considered in determining whether the freight tariffs fixed by the complainants are too high, and also aid in determining what they should be. It is true that lower passenger rates are felt more generally, and for this reason are more fully appreciated by the large majority of the public than lower freight rates, which are not felt so readily by the consumer, the same as the collection of direct and indirect taxes. But, so far as the interests of the public at large are concerned, it is of much more importance to them to enjoy the benefit of the lower freight rates than passenger rates, provided the latter are not excessive or unreasonable. High freight tariffs not only directly affect the prices of commodities to the consumer, but may seriously cripple, if not totally destroy, manufacturing industries, and the business of wholesale dealers, if higher than those charged from competitive points outside of the State, as it is the price at the place of delivery which will control the trade. As the injunction against the enforcement of the two cents a mile passenger rate as being confiscatory and therefore violative of the provisions of the national constitution, leaves the three cents a mile statute, *St. L. I. M. & S. Ry. Co. v. State*, 86 Ark., 343 (Sec. 6611, Kirby's Digest of the Statutes of Arkansas) in full force, and this rate has been put in operation by the railroads since the granting of the temporary injunction, this change, therefore, adds to the net earnings of the complainants at least thirty-five per cent without any corresponding increase of expenditures. Whether, the

442

railroad companies should not be charged with a fifty per cent increase in these rates, in view of the fact that the reduction below three cents a mile is voluntary on their part, and not in pursuance of any act of the legislature or the Commission, need not be determined at this time, although in view of the decisions of the Supreme Court, it is very doubtful whether the railroads, if they exercise this power, can be heard to complain if by reason thereof their earnings are not compensatory. In *Lake Shore, etc. R. R. Co. vs. Smith*, 173 U. S. 684, 696, 19 S. Ct. 565, 43 L. Ed. 858, it was held that the State had not the power to enact such legislation without violating the national constitution, and in *Knoxville vs. Knoxville Water Co.*, 212 U. S. 1, 29 S. Ct. 148, it was expressly held that if the company sees proper to make reductions in special cases when not required to do so by law, the decrease, by reason of such reduction can not be considered by the Courts in determining the reasonableness of the rates fixed by law. The Court there said:

"The Company, it is true, might, if it chooses, allow such a discount (a discount of 5% for prompt payments) from the ordinance rates, but the ordinance required no discount from the rate established by it, and the company, therefore, was bound to offer none. If it stood upon the letter of the ordinance, as it had the right to do, and exacted from the consumers the full charge prescribed by the ordinance, the amount which would have been realized would
443 have been over four thousand dollars more than that found by the master."

But, as this case is not now before the Court for final determination and in view of the fact that the public is the beneficiary of these reduced, special rates, they being general and uniform, and the further fact that in this motion to modify the injunction the Court is asked to require a reduction of passenger rates, it is unnecessary at this time, to determine that question, but for the purpose of ascertaining the earnings of complainants, the Court will charge them with an increase of thirty five per cent.

As to what constitutes a reasonable rate must depend upon the facts of each case, and can not be determined without reference to the interests of the public. *Covington & Lexington Turnpike Co. vs. Sandford*, 164 U. S. 378, 17 S. Ct. 198, 41 L. Ed. 560; *Smyth vs. Ames*, 169 U. S. 545, 18 S. Ct. 418, 42 L. Ed. 819; *Reagan vs. Farmer's Loan & Trust Co.*, *supra*; *San Diego Land Co., vs. National City*, 174 U. S. 739, 755, 19 S. Ct. 804, 43 L. Ed. 1154; *Chicago & Northwestern R. R. Co. vs. Dey* 35 Fed. 866, 878.

In *Covington, etc. Turnpike Co. vs. Sandford*, the Court said:

"It can not be said that a corporation is entitled of right, and without reference to the interests of the public, to realize a given per cent upon its capital stock."

This was quoted with approval in *Smyth vs. Ames*, and the Court there added:

"It can not, therefore, be admitted that a railroad corporation maintaining a highway under authority of the state, may fix its rates with a view solely to its own interests and ignore the
444 rights of the public. But the rights of the public would be ignored if rates of transportation of persons or property on a

railroad are exacted without reference to the fair value of the property used for the public or the fair value of the services rendered, but in order simply that the corporation may meet operating expenses, pay interest on its obligations, and declare a dividend to its stockholders."

Another matter which is entitled to consideration is the fact which has been brought out at this hearing, that the St. Louis, Iron Mountain & Southern Railway Co. and the Chicago, Rock Island & Pacific Ry. Co., have, within the last few years, and since the establishment of the Commission rates, constructed extensive branch lines through new and unsettled sections of the State; that these lines were constructed at great expense, owing to the fact that the greater part of these branches runs through a swampy country, some of it subject to overflows, which necessitated high embankments; that these roads were built principally to serve as feeders for the main line, and at the same time enable these roads to obtain shorter lines for that part of its interstate traffic, which merely passed through the State. These are matters which must be taken into consideration in determining what would be proper net earnings on the investments. It would hardly be proper for the Courts to say that such roads are entitled to as great a compensation, on their investments, from intrastate business as the ordinary roads built for the accommodation of the intrastate as well as the interstate business. As is well known some of the Pacific Roads traverse the desert for hundreds of miles through a strip of territory where there is practically no intrastate business, either freight or passenger.

445 Would it be proper, in such cases, to hold that the road should have the right to charge for its intrastate traffic in that section tariff rates high enough to enable it to earn a certain, fixed percentage on its investment? Would not in such a case, the rates have to be so high as to be confiscatory of the property of the residents of that State? Must the public guaranty the railroads a certain income on their investment, regardless of the condition of the country traversed, or whether bad judgment was exercised in the selection of the route? We do not think so. New lines or branches to increase the business of the trunk line, or the exercise of bad judgment in the building of a railroad are matters to be considered in determining what rates would be fair and just to the corporation as well as the public. That the railroads are entitled to reasonable profits on their investments, and the public to reasonable rates, or, to express it differently, that the rights of the public and railroad companies are reciprocal, is the correct rule of law.

In *Reagan vs. Farmer's Loan & Trust Co.*, supra, Mr. Justice Brewer, speaking for the Court, in the concluding part of the opinion, said:-

"It is unnecessary to decide, and we do not wish to be understood as laying down as an absolute rule, that in every case a failure to produce some profit to those who have invested their money in the building of a road is conclusive that the tariff is unjust and unreasonable. And yet justice demands that every one should receive some compensation for the use of his money or property, if

it be possible without prejudice to the rights of others. There
446 may be circumstances which would justify such a tariff;
there may have been extravagance and a needless expenditure of money; there may be waste in the management of the road; enormous salaries, unjust discrimination as between individual shippers, resulting in general loss. The construction may have been at a time when material and labor were at the highest price, so that the actual cost far exceeds the present value; the road may have been unwisely built, in localities where there is not sufficient business to sustain a road. Doubtless too, there are many other matters affecting the rights of the community in which the road is built as well as the rights of those who have built the road." 154 U. S. 412.

In *San Diego, etc. Co. vs. Jasper*, 189 U. S. 439, 446, 23 S. Ct. 571, 47 L. Ed. 892, it was held,

"If a plant is built, as probably this was, for a larger area than it finds itself able to supply, or, apart from that, if it does not, as yet, have the customers contemplated, neither justice or the Constitution requires that, say, two-thirds of the contemplated number should pay a full return."

Nor is it required that the particular rate of compensation must in all cases and in all parts of the Country be the same. *Wilcox vs. Consolidated Gas Co.*, 212 U. S. 19, 29 S. Ct. 192.

Guided by these principles, the Court is of the opinion
447 that rates which will enable the complainant to earn six per cent on their investment, if fairly entitled thereto by prevailing conditions, would be reasonable, especially in view of the fact that a large part of the money used in the construction of these roads was obtained from loans secured by mortgages, and these loans only bear from four to five per cent interest per annum, thus leaving a larger return for the stock holder, who, of course, is secured, and in case of insolvency of the company would be postponed until the mortgage bond holders are paid in full. For these reasons, the risk of the investment of the stockholder being greater than that of the bondholders, he is entitled to a higher rate of interest on his investment. In determining what rates would be just and reasonable, the Court is relieved of passing upon conflicting evidence for the purpose of determining the value of the investment. Complainants in their bills, only ask for compensatory rates on the value of the roads, as determined by the State Board of Railroad Assessors for the purpose of taxation. The assessments in this State are conceded to be upon the basis of fifty per cent of the actual value of the property and they therefore ask to be permitted to earn fair dividends on double the amount their roads are assessed for taxes. (This does not apply to the branch line of the Rock Island, lately constructed, and which is assessed at a nominal value.) For the purpose of determining how much of that amount should be taken into consideration for the intrastate traffic calculations were made by expert accountants under the direction of Judge Van Deventer and
448 the calculations adopted by him for the purpose of passing upon the motions for preliminary injunctions are now adopted.

While the revenues of the roads, and especially the increased earnings since the new rates, pending this litigation, have been put into effect, vary somewhat, it is impossible to make different rates for each road. The fact that in most of the larger cities of the State two or more of the roads compete for business, and therefore must carry freight at the same rates would prevent making different rates, and the tariffs prepared by the roads themselves are practically uniform.

The values of the roads for the intrastate traffic, as ascertained by the accountants and adopted by Judge Van Deventer, are as follows:—

St. L. I. M. & S. Ry. Co.....	\$12,880,982.44
St. L. & S. W. Ry. Co.....	4,774,880.82
C. R. I. & P. Ry. Co.....	5,200,422.39
St. L. & S. F. Ry. Co.....	3,519,791.41

The earnings of these roads for the last six months of the year 1907, calculated on a revenue basis, allowing for the greater cost of intrastate business, one hundred per cent on freight, and fifteen per cent on passenger traffic more than for interstate business, as determined by Judge Van Deventer in these cases, are as follows:

449	Name of road.	Gross frt. e'rn'gs.	Frt. exp.	Gross pass. e'r'gs.	Pass. expenses.	Net loss.
	St. L. I. M. & S. Ry. Co.	\$640,248.17	\$800,041.29	\$836,542.20	\$865,423.66	\$188,674.58
	St. L. & S. W. Ry. Co. . . . .	.....	.....	.....	.....	43,319.22
	C. R. I. & P. Ry. Co.	210,813.57	372,913.48	253,395.52	220,750.00	129,454.39
	St. L. & S. F. Ry. Co.	139,002.89	218,917.65	187,173.87	176,493.67	69,234.57

NOTE.—The returns of the St. L. & S. F. Ry. Co., were only for four months and in order to make them uniform with the others this table shows the earnings and expenditures for six months. 50% has been added and is included in the above. The returns of the St. L. & S. W. Ry. Co. include the earnings for the entire year ending June 30, 1908.

450 In addition to these earnings each of the roads also showed the receipt of considerable sums from what is called "Miscellaneous Earnings," which are not included in the above tables. These earnings come principally from mail and express, but there is nothing in the evidence to show whether these items caused a net profit or not, as the auditors testified that it is impossible to divide them between intra- and interstate business. These earnings were as follows, and constitute the percentages of the entire business of the roads as shown by the figures on the following table:

451

Miscellaneous Earnings.

Name of road.	Gross frt. e'm'gs.	Percentage.	Gross pass. e'p'gs.	Percentage.	Total gross earnings.
St. L. I. M. & S. Ry. Co.	\$122,814.41	2.51%	\$373,785.47	21.01%	\$496,599.88
C. R. I. & P. Ry. Co.	19,033.43	1.48%	78,940.50	11.29%	97,940.50
St. L. & S. W. Ry. Co.	46,228.88	1.43%	154,285.75	17.14%	200,514.63

NOTE.—The St. L. & S. F. Ry. Co. did not include this item in its statement, but it would probably average the same proportion to the entire business as that of the other roads.

452 For the purpose of these proceedings, the Court is of the opinion that an increase of 33 $\frac{1}{3}$ % on the tariff of freight rates in force at the time these injunctions were granted, the increase to be calculated upon a revenue basis, will enable complainants to earn a reasonable compensation when added to the increased passenger rates, and at the same time prevent the exaction of unjust and unreasonable rates from the public. Calculating the increase of revenue upon that basis, the net earnings for a year, assuming that the business will be the same as it has been, will be as follows:

Road.	Incrs. in frt. e'r'gs.	Incrs. in pass. e'r'gs.	Total.	Net income.
St. L. I. M. & S. Ry. Co.	\$426,833.12	\$585,579.40	\$1,012,412.52	\$635,063.36
St. L. & S. W. Ry. Co.	116,112.53	154,158.42	270,270.95	226,951.73
C. R. I. & P. Ry. Co.	140,542.38	177,376.85	317,919.23	59,010.45
St. L. & S. F. Ry. Co.	92,668.59	131,021.45	223,690.04	85,220.90

The net income will allow the companies a profit on their respective investments, as follows:

St. L. I. M. & S. Ry. Co.....	over 5%
St. L. & S. W. Ry. Co.....	" 4.8%
C. R. I. & P. Ry. Co., a little less than.....	1½%
St. L. & S. F. Ry. Co. about.....	2½%

These figures indicate that some of the roads would earn but a very small dividend on their investment so far as the intrastate traffic is concerned, but it is impossible, for the reasons hereinbefore stated, to provide the same earnings for roads whose conditions differ so widely as these do. The St. Louis, Iron Mountain & Southern Co., which does the largest proportionate intrastate business, will earn over five per cent on its investment. In view of the fact that it has

453 built two very extensive branches lately through a country having but few inhabitants and no industries, lines intended primarily for its through interstate business, so as to enable it to have a short line from the west to the Gulf of Mexico, this is a very reasonable and fair compensation. The St. Louis South Western Ry. Co., which does the much largest proportionate intrastate business, will earn nearly 5% on the basis of its earnings for the year ending June 30, 1908, which included the first six months of the year 1908, when confessedly traffic was the smallest. Lumber which is its largest tonnage, was practically not moving at all during that time. At the final hearing, the evidence will, no doubt, show what should be considered as earnings for ordinary times. The St. Louis & San Francisco Ry. Co., although it has a large mileage in the State, does but a comparatively small intrastate business, as shown by its statement hereinbefore set out. Its gross earnings on both passenger and freight traffic being only about nine per cent of its valuation. The earnings of the Chicago, Rock Island & Pacific Ry. Co., seem to be the smallest in proportion to its investment, but a new branch line of 147 miles is included at a valuation of \$3,000,000.00, although assessed at less than \$300,000.00, by reason of the fact that it was but recently built through a swampy section of the State, has been but a short time in operation and was intended principally for its through interstate business. A computation of the earnings of each of the roads from its intrastate business, as compared with its valuation, as shown by their statements, will

454 show practically the same differences:

Road.	Net loss for year.	Percentage of loss on capital invested in intrastate traffic.
St. L. I. M. & S. Ry. Co.	\$377,349.16	About 2.9%
St. L. S. W. Ry. Co.....	43,319.22	" .9%
C. R. I. & P. Ry. Co.....	258,908.78	" 5%
St. L. & S. F. Ry. Co.....	138,469.14	" 3.9%

As the country traversed by these roads is being rapidly settled, and new industries and manufacturing plants are springing up along these lines, the intrastate business will, in all likelihood, increase rapidly. In any event, unless different rates should be made for each road, according to its location, cost of building, judgment in selection of the line, it is impossible to fix any rates which will enable each of the roads to earn the same dividend. The tariffs which they have put in effect are the same for all of the roads, and for the reasons hereinbefore stated, it would be impracticable to do otherwise.

As these suits will necessarily require considerable time before the final decrees can be rendered, either party may at any time apply to the Court for a modification of this order, if, after a fair trial, it is found that the rates are unjust to either party. The Railroad Commission, the Court is informed, has prepared a freight tariff, which, in its opinion, would increase the net revenue of these roads from freight traffic thirty three and one third per cent. Copies of these schedules should be furnished immediately to the complainants, and the Court has no doubt that if these tariff sheets are found 455 to be inaccurate and will not produce such an increase in revenue, the parties can agree among themselves to make such changes as will bring about that result. Should they be unable to do so, the Court will refer the matter to a Special Master for the purpose of preparing such tariff rates.

A decree modifying the injunctions now in force, in conformity with the views herein expressed may be prepared by the parties and submitted to the Court.

Endorsed on back thereof: Filed June 1, 1909. W. P. Feild, Clerk.

456 And on June 2, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and files herein its replication to answer:

Which replication to answer is as follows:

United States Circuit Court, Western Division of the Eastern District
of Arkansas.

In Chancery.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Complainant,
versus
ROBERT P. ALLEN et al., Defendants.

This replicant, St. Louis Southwestern Railway Company, saving and reserving to *himself* all and all manner of advantages of exception which may be had and taken to the manifold errors, uncertainties and insufficiencies of the answer of the Defendants, Robert P. Allen, John W. Crockett and John E. Hampton, for replication thereunto saith that *he* doth and will aver, maintain and prove *his* said bill to be true, certain and sufficient in the law to be answered unto by the said Defendant-, and that the answer of the said Defendant- is very uncertain, evasive, and insufficient in law to be replied unto by this replicant; without that, that any
457 other matter or thing in the said answer contained, material or effectual in the law to be replied unto, confessed or avoided, traversed or denied, is true; all of which matters and things this replicant is ready to aver, maintain and prove as this Honorable Court shall direct and humbly prays as in and by *his* said bill *he* hath already prayed.

MOORE, SMITH & MOORE,
Solicitors for Complainant.

Endorsed on back thereof: Filed June 2, 1909. W. P. Feild,
Clerk.

And on June 23, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY
v.
ROBERT P. ALLEN et al.

On this day come the parties to the said case, and it is thereupon ordered that Complainant execute a bond to the United States of America in the penal sum of Three Hundred Thousand Dollars, without additional sureties, conditioned that it shall, on and after July 1st, 1909, issue to each person purchasing a ticket or paying cash fare upon the train, from one point in the State of Arkansas to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket, and the date thereof; and to every shipper

or consignee when paying freight on any commodity shipped from one part of the State of Arkansas to another part, and
 458 which is wholly the subject of intrastate traffic, a receipt or freight bill showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rate continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment.

The Complainant shall keep a correct account, showing as respects the carriage of freight and passengers the difference between the amount actually charged and that which would have been charged had the inhibited rates been applied, and further conditioned that if it should eventually be decided that so much of this order as inhibits the enforcement of the rates prescribed by the Railroad Commission of Arkansas in Distance Tariff No. 3, and the two cents per mile passenger rate prescribed by the Statutes of 1907, should not have been made, that the Complainant shall refund to the owners and holders of the certificates issued by it the excess charges as shown by the same, provided, however, that such certificate as to the amounts and dates shall only be prima facie evidence of these facts.

Such bond shall be in addition to the bond heretofore executed and not in lieu of it.

(Signed)

JACOB TREIBER, *Judge*.

And on June 30th, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

459

ROBERT P. ALLEN et al.

The Complainant Railway Company shall submit to the examination and inspection of the Railroad Commission, and its counsels and its experts and accountants, all its books records, accounts, vouchers, reports, payrolls, receipts, contracts and any other documents or writings relating to its intrastate business in the State of Arkansas, kept either in its general office, or in any station upon reasonable notice to the General Auditor of the Complainant, or the person in charge of the Auditor's office, and at such examination the Complainant may be present by its employees.

The information obtained by the Defendant Commission under this order shall not be divulged for any other purpose than the defense of these suits.

It is further ordered that should any employee of the Commission or any person obtaining information by reason of these proceedings, divulge information obtained hereunder otherwise than herein provided, or conduct himself in an improper or obnoxious manner, the Special Master shall report the same to the Court, in order that the Court may inflict punishment on him as for contempt, and

also disbar him from further employment in the examination or investigation herein provided.

That if for the purpose of ascertaining any facts relevant to the issues involved in this action, it is necessary to examine books, reports or other papers in which interstate business, as well as intrastate matters are kept, Defendant Commission, their agents and employees shall have access to such books, reports and papers
460 in the same manner as is provided herein for those relating to intrastate business alone.

That in all matters referred to the Master in Chancery herein, in which the parties are unable to agree, the Master is authorized to determine the matters in dispute.

(Signed)

JACOB TREIBER, *Judge*.

And on July 2, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

On this day come the parties hereto, the cause being at issue and ask the appointment of a Commissioner to take testimony herein, it being agreed that same may be taken upon oral interrogatories, and that the testimony taken in this case and also of that in the St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, et al., pending herein may be used in each of these cases as though same were consolidated and heard together as far as applicable.

And the Court being advised that the testimony can not be produced in the usual time, it is therefore considered and ordered that P. C. Dooley, Standing Master of this Court, be and he is directed to take said testimony with full power to compel the attendance of all witnesses and require the examination of all books, papers, writing, accounts, vouchers and other documents necessary;

461 And that the Plaintiff shall have sixty days, if necessary, in which to produce its testimony before said Master, beginning October 1st, 1909; that the Defendants shall produce their testimony in Sixty days, beginning at the end of said sixty days allowed Plaintiff, or when the Plaintiff's testimony is finished, if it shall conclude before the expiration of said sixty days; and that each party shall have thirty days after the finishing of the taking of testimony in chief for the production of evidence in reply or rebuttal, and this order having been made on June —, 1909, but not entered, it is ordered by the Court that it be entered now for then.

(Signed)

JACOB TREIBER, *Judge*.

And on July 5, 1909, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes the Complainant, by John M. Moore, Esq., its Solicitor and files herein its additional bond for Three Hundred Thousand Dollars (\$300,000.00), as required by order of Court, dated June 23, 1909, and said bond having been examined by the Judge of this Court, the same is approved.

Which Bond is as follows:

Know all men by these presents, That St. Louis South-
462 western Railway Company is held and firmly bound unto the United States of America in the penal sum of Three Hundred Thousand Dollars (\$300,000.00), for the payment of which it hereby binds itself, its successors and assigns.

The conditions of this obligation are such that:

Whereas, in a suit of the above bounden, (a corporation), against Robert P. Allen, John W. Crockett and John E. Hampton, Railroad Commission of the State of Arkansas, and Henry Leigh and George McLean, an order of temporary injunction was issued enjoining and restraining the Defendant Railroad Commissioners of the State of Arkansas, from enforcing certain freight and passenger rates in said State; and,

Whereas, it was subsequently ordered in said proceeding,

"That Complainant execute a bond to the United States of America in the penal sum of Three Hundred Thousand Dollars (\$300,000.00) signed by itself without additional sureties, conditioned that it shall, on and after July 1, 1909, issue to each person purchasing a ticket, or paying cash fare upon the train from one point in the State of Arkansas, to another point in the same State, and confined exclusively to intrastate travel, a certificate or coupon showing the amount paid by such passenger for such ticket and the date thereof; and to every shipper or consignee when paying freight on any commodity shipped from one part of the State of Arkansas to another part, and which is wholly the subject of intrastate
463 traffic, a receipt or freight bill, showing the amount charged for the carriage of such freight, and also endorsed on the same bill the amount or rate which would have been charged had the inhibited rate continued in force; which receipt or coupon or freight bill shall be prima facie evidence of the amount paid and the date of payment. The Complainant shall keep a correct account, showing as respects the carriage of freight and passengers, the difference between the amount actually charged and that which would have been charged had the inhibited rates been applied, and further conditioned that if it should eventually be decided that so much of this order as inhibits enforcement of the rates prescribed by the Railroad Commission of the State of Arkansas in Distance Tariff No. 3, and the two cent per mile passenger rate prescribed by the Statute of 1907, should not have been made, that the Complainant shall refund

to the owners and holders of the certificates issued by it the excess charges as shown by the same, provided, however, that such certificate as to the amounts and dates shall only be prima facie evidence of these facts," and,

Now, Therefore, if the said St. Louis Southwestern Railway Company shall comply with and perform each and all of the terms, conditions and provisions above set forth, and shall issue the certificates or coupons to passengers, receipts or freight bills to shippers and consignees, and keep the accounts as required by said order to be

kept, and make the payments or refunds as therein provided
464 to be made, if it should be eventually decided that so much of said order of injunction as inhibits the enforcement of said inhibited rates should not have been made, then this obligation shall be null and void, otherwise to remain in full force and effect.

In witness whereof, the said St. Louis Southwestern Railway Company has caused these presents to be executed this the 1st day of July, 1909.

ST. LOUIS SOUTHWESTERN
RAILWAY COMPANY,
By F. H. BRITTON, *Vice-President*.

Endorsed on back thereof: Filed July 5, 1909, W. P. Feild, Clerk. By W. Presley Feild, D. C.

465 UNITED STATES OF AMERICA,
*Western Division of the
Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 4th day of April, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: June 10th, 1910.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Now on this day comes the Complainant, St. Louis Southwestern Railway Company, by its Solicitor, John M. Moore, Esq., and the Defendants Robert P. Allen, and others, by their Solicitors, William F. Kirby, Esq., and the application of P. C. Dooley, Master herein, for the payment to him of the sum of Four Hundred and Sixty Nine Dollars and Ten Cents (\$469.10) for money disbursed by him as necessary expense of the Master to date in relation to the hearing herein and that he be allowed and paid the sum of Two Thousand Dollars, (\$2000.00), as a partial payment on account of services as Master, coming on for hearing and upon consideration thereof,

It is considered, ordered and adjudged that the Master be and he is allowed the sum of Four Hundred and Sixty Nine Dollars and Ten Cents, (\$469.10) for his expenses to date; and the sum of Two Thousand Dollars (\$2000.00) as partial compensation on account of his services as Master,

That the Complainants, St. Louis, Iron Mountain & Southern Railway Company and St. Louis Southwestern Railway Company pay one half of said sum—\$1234.55—and that the Defendants, Robert P. Allen, et al., pay one half thereof—\$1234.55—which said sums shall be taxed by the Clerk of this court as costs in this case.

(Signed)

JACOB TREIBER, *Judge.*

And on July 5th, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Now on this day come the parties to said cause by their respective Solicitors, and it is ordered that the taking of testimony in rebuttal on the part of the Plaintiff be postponed until the 26th day of September, 1910.

And on September 29, 1910, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al., Railroad Commissioners, &c.

P. C. Dooley, the Standing Master in Chancery who was directed to take the proofs in these causes having died, and there still being some evidence to be taken herein, it is ordered by the Court that Charles M. Rice, Esq., be and is hereby appointed Special Examiner to take the proofs offered in the above entitled causes, with all the powers of and subject to the directions given by the Court to the said P. C. Dooley, Esq., in these causes.

(Signed)

JACOB TREIBER, *Judge.*

And on October 1, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al., Railroad Commissioners, &c.

Comes Charles M. Rice, Esq., heretofore appointed Special Examiner to take the proofs offered in the above entitled causes, and files herein his oath as such Special Examiner, which is as follows:

UNITED STATES OF AMERICA,

Eastern District of Missouri:

I, Charles M. Rice, do solemnly swear, that I will support the Constitution and laws of the United States and that I will faithfully discharge the duties of Special Examiner, in the causes of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, et al., State Board of Railroad Commissioners of Arkansas, No. 1637, and St. Louis Southwestern Railway Company against same Defendants, No. 1636, pending in the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, to which position I have been appointed by the said Court.

(Signed)

CHARLES M. RICE.

468 Subscribed and sworn to before me this 30th day of September, A. D., 1910.

[SEAL OF SAID COURT.]

JAMES R. GRAY,
*Clerk of the Circuit Court of the
Eastern District of Missouri.*

Which said oath is on file in this office.

And on October 12, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes the Defendant Railroad Commission of Arkansas, by Joseph M. Hill, William F. Kirby and James H. Harrod, Esqs., its Solicitors, and files herein its motion to modify the order heretofore entered herein permitting the Complainant to charge three cents a mile on passenger traffic, and to restrain it from charging more than two cents per mile on intrastate passenger traffic.

Which motion to modify the Injunction is as follows:

In the United States Circuit Court for the Eastern District of
Arkansas.

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
v.
ROBERT P. ALLEN et al.

Comes W. A. Falconer, Chairman, Robert P. Allen, and
469 John W. Crockett, Commissioners, constituting the Railroad
Commission of the State of Arkansas, Defendants herein,
and under leave of Court heretofore granted and move this Honorable
Court for a change in the rates in force by the Plaintiff Railroad
pending this litigation, say:

That at the hearing heretofore had this Honorable Court found
the freight rates promulgated by the Plaintiff Railroad to be un-
reasonable, and pursuant to a suggestion made by the Court the
Traffic Officials of various Railroads, including the Plaintiff Rail-
road and the Railroad Commissioners conferred over the construc-
tion of a tariff, which would yield to Plaintiff Railroad approxi-
mately thirty three and one third per cent more revenue than Dis-
tance Tariff No. 3, the enforcement of which had been enjoined by
Honorable Willis Van Devanter, United States Circuit Judge. That
a tariff was agreed upon and put in force on June 1, 1909, known
as the "Court Tariff." Under the operation of said tariff, Plaintiff
Railroad has increased its State freight revenue — per cent, so these
Defendants are informed and believe.

That at the hearing aforesaid this Honorable Court declined to
interfere with the three cent passenger rate which had been put
in force by the Plaintiff Railroad, and the Plaintiff Railroad has
charged three cents per mile passenger rate from that time until
the present time, and is still charging the same.

That in sustaining its case the theory upon which the Plaintiff
seeks to prove that freight and passenger rates in force were confis-
catory is known as the "Revenue Theory," and by a vast
470 preponderance of the testimony already taken in the case it
is established that whatever value that theory may have
elsewhere, so far as applied to the conditions in Arkansas its ap-
plication as a factor to divide the intrastate and interstate expenses
is without relation to the subject, owing to the rate conditions pre-
vailing in the State of Arkansas.

The State rates and interstate rates are such that it is impossible
to measure the expenses by the revenue received from the traffic
with even a remote approximation to accuracy. That the State
has carefully examined the expenses of the Plaintiff Railroad in the
State of Arkansas, and has localized, so far as possible, all expenses
between State and interstate traffic, and where it is possible to local-
ize those expenses, has used the most appropriate factor to approxi-
mate the same, taking the factor in each instance most nearly

representing actual conditions. In this way the State has been able to demonstrate that the contentions of the Plaintiff made in ex parte affidavits submitted to Judge Van Devanter that the State passenger traffic cost fifteen to fifty per cent more than interstate passenger traffic, in proportion to revenue, was wholly without foundation in fact. On the contrary, the facts are that for the six months ended December 31, 1907, when the two cent passenger fare was in force, the Plaintiff Railroad was making a return upon its property devoted to intrastate passenger business (dividing such property according to the railroad's formula of so dividing it) of 5.79%; and suffering a loss on the interstate passenger business of .66%. That during said period the revenue per passenger mile on State traffic was \$.01993; and the revenue per passenger 471 mile in interstate traffic was \$.01719.

It was further shown that on the total State business Plaintiff Railroad was earning 9.16% return upon its property (dividing its property according to the Railroad's formula of dividing same).

That owing to the increased freight earnings under the Court Tariff over Standard Distance Tariff No. 3, and owing to the increase in the passenger earnings over said period of from two to three cents, the rates, passenger and freight, now being earned by the Plaintiff Railroad are unreasonable, unlawful and burdensome to the people of the State.

Reference is made to a petition filed in these cases, in the case of J. J. Carle vs. Chicago, Rock Island & Pacific Railway, and to the case of Wilbur F. Boyle vs. the St. Louis & San Francisco Railroad, wherein it is shown that said Railroads have been operating for the past fifteen months under a two and one half cents passenger rate, and are seeking now to impose a three cent passenger rate in the State of Arkansas, on all intrastate passengers. That for the reasons set forth in the petition of the Railroad Commission in said cases, said Commission conceives it is its duty to oppose the three cent passenger rate being put in force by said roads, and in view of the fact that said roads are making less return upon their property devoted to said State traffic, it would be inequitable and unjust to prevent them charging three cents while the Plaintiff Railroad is charging three cents.

In view of the facts developed in said hearing, as hereinbefore set forth, the Railroad Commission prays this Honorable 472 Court to modify the order heretofore made, permitting the Plaintiff Railroad to charge three cents per mile on passenger traffic and restrain it from charging more than two cents per mile on interstate passenger traffic.

JOSEPH M. HILL,
WILLIAM F. KIRBY,
JAMES H. HARROD,

Attorneys for the Railroad Commission.

Endorsed on back: Filed Oct. 12, 1910. W. P. Feild, Clerk.

And on October 13, 1910, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and filed herein its Response to the motion filed herein, on October 11, 1910.

Which response to motion is as follows:

In the United States Circuit Court for the Eastern District of Arkansas.

No. 1636. In Chancery.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,

v.

ROBERT P. ALLEN et al., Defendants.

473 *Response by Complainant to Defendant's Motion to Modify the Injunctions in said Cause.*

Complainant in response to Defendant's aforesaid application denies that it has earned or is earning a greater amount of revenue from its passenger traffic, or a sufficient amount to enable it to realize a net revenue of six per cent per annum on said business, or to amount to reasonable or adequate compensation for the service performed by it conducting said traffic.

It further denies that it is earning a net revenue equal to six per cent per annum or reasonable and adequate compensation on its freight business under the Court Tariff.

It denies that under the operation of said tariff it has increased its State Freight revenue more than above that allowed by the Arkansas Commission.

For further response Complainant represents that all of the testimony in chief on the part of the Complainant in support of its views as to the relative expense of conducting state and interstate traffic, and the manner in which same should be divided between said classes of traffic, upon which the Honorable Willis Van Devanter, Circuit Judge, acted in granting the preliminary injunction in said proceeding and all the testimony in chief on the part of the Defendants, contesting the aforesaid views and methods of apportionment of expense as between state and interstate traffic, and in support of other views and methods entertained by them, has also taken and Complainant is now engaged in taking its testimony in rebuttal, and it believes will complete same before the end of the current month.

474 That the effect of said motion as entertained by the Court would be to arrest the taking of testimony during the hearing thereof and require the Court to hear the present application on ex parte statements, or to investigate and hear argument on the effect of the testimony that has been taken as aforesaid, notwithstanding the fact that the Complainant is in the midst of taking its testimony in rebuttal and expects to take additional testimony that will be relevant and material in support of its contention and in opposition to the contentions of the Defendants, and that this cause will be ready for submission in a few weeks and would then have to be re-argued and re-heard by the Court, which Complainant verily believes and alleges would operate as a great hardship upon it and as a great burden upon the Court and Counsel and would not conduce to the end of justice.

Wherefore Complainant prays that Defendants' motion to reopen the question upon which the temporary injunction was granted and to modify said injunction on an interlocutory hearing at this stage of the case and on a part only of the testimony material to its determination be denied.

MOORE, SMITH & MOORE,
Attorneys for Respondent.

Endorsed on back thereof. Filed Oct. 13, 1910. W. P. Feild, Clerk.

475 UNITED STATES OF AMERICA,
*Western Division of the
Eastern District of Arkansas:*

Be it remembered, That at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the 17th day of October, Anno Domini, One Thousand Nine Hundred and Ten, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber Judge presiding and holding said Court, the following proceedings were had, to-wit: January 2nd, 1911:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes the Complainant, by John M. Moore, Esq., its Solicitor, and come the Defendants, by James H. Harrod, Esq., their Solicitor and this cause having been set down for final hearing on this date and it appearing to the Court that Senior Counsel for the Defendants is unavoidably detained and can not reach the hearing, it is ordered by the Court, by agreement of parties, that the hearing herein be continued until tomorrow morning.

And on January 3, 1911, the following proceedings were had, to-wit:

476

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, Henry Leigh
& George L. McLean.

Comes the Complainant, by John M. Moore, Esq., its Solicitor, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors; and this cause now coming on for final hearing upon the bill, exhibits thereto, answer, replication and all pleadings and proof in the case together with all depositions and exhibits thereto taken before the Master or otherwise, thereupon the Court proceeds to hear the evidence and argument of Counsel as well on the part of Defendants as of the Complainant, and the hearing hereof not being concluded the same is continued until tomorrow morning.

And on January 4, 1911, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed, and the
477 hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 5, 1911, the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed, and the hearing

hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 6th, 1911, the following proceedings were had to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, JOHN W. CROCKETT and JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas.

478 Comes the Complainant, by Moore, Smith & Moore, its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the trial hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on the same day the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN et al.

Comes Charles M. Rice, Esq., Special Examiner herein, and asks the Court for an allowance for his services and expenses in these causes, and come the parties by their respective Solicitors, and the Court being well and sufficiently advised in the premises,

It is considered, ordered and adjudged by the Court that Charles M. Rice, be and he is hereby allowed the sum of Five Hundred Dollars (\$500.00) as his compensation for his services as Special Examiner, and the further sum of Forty Three Dollars and Twenty Five Cents (\$43.25) for expenses incurred by him in the performance of his duties as such Special Examiner, and that the Complainants, St. Louis Southwestern Railway Company, and St. Louis, Iron Mountain & Southern Railway Company pay one half of said sum (\$271.63) and that the Defendants Robert P. Allen, et al., pay one half thereof, (\$271.62) which said sum shall be taxed by the Clerk of this Court as costs in these causes when finally determined.

479 And on January 7th, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.

ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas.

Comes the Complainant by Moore, Smith & Moore, Esqs., their Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until Monday afternoon at half past one o'clock.

And on January 9th, 1911, the following proceedings were had, to-wit:—

No. 1633

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.

ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on Saturday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until Monday morning, January 16th, 1911, at half past nine o'clock.

And on the same day, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY,
v.

ROBERT P. ALLEN, JOHN W. CROCKETT AND JOHN E. HAMPTON,
Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and it being made to appear to the Court that the term of office of John W. Crockett and John E. Hampton, Railroad Commissioners of the State of Arkansas, Defendants herein has expired and that under the laws of the State of Arkansas, William F. McKnight and George W. Bellamy have been elected to succeed said John W. Crockett and John E. Hampton, as Railroad Commissioners of the State of Arkansas, and have qualified and are now acting as such.

It is now ordered by the Court by consent of the parties hereto, that the names of William F. McKnight and George W. Bellamy be

substituted for that of John W. Crockett and John E. Hampton and that this cause abate as to said Hampton and Crockett and progress in the names of William F. McKnight and George W. Bellamy, substituted as Defendants aforesaid.

481 And on January 16, 1911, the following proceedings were had, to-wit:—

No. 1633.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on January 9th, 1911, is now resumed; and the hearing hereof not being concluded, the same is continued until tomorrow morning at half past nine o'clock.

And on January 17th, the following proceedings were had, to-wit:—

No. 1634.

ST. LOUIS, SOUTHWESTERN RAILWAY COMPANY.

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT, and GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded, the same is continued until
482 tomorrow morning at half past nine o'clock.

And on January 18, 1911, the following proceedings were had, to-wit:—

No. 1635

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the hearing

hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 19, 1911, the following proceedings were had, to-wit:—

No. 1633.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the trial hereof not being
483 concluded on yesterday the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 20, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs., its Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday, the same is now resumed; and the hearing hereof not being concluded the same is continued until tomorrow morning at half past nine o'clock.

And on January 21st, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY.

v.

ROBERT P. ALLEN, WILLIAM F. MCKNIGHT AND GEORGE W. BELLAMY, Railroad Commissioners of the State of Arkansas, et al.

Comes the Complainant, by Moore, Smith & Moore, Esqs.,
484 Solicitors, and come the Defendants, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and the hearing hereof not being concluded on yesterday the same is now resumed; and the Court having heard the evidence and argument of Counsel and not being well and sufficiently advised as to what judgment to render herein takes time to consider of its judgment.

At the final hearing the following testimony was introduced by both Complainant and Defendants.

For testimony see folio — of record on appeal to U. S. Sup. Ct. case St. Louis, Iron Mt. & So. Ry. Co. v. Robert P. Allen et al., &c., which is by stipulation of consent and order of Court to be used in this cause.

485 UNITED STATES OF AMERICA,
Western Division of the
Eastern District of Arkansas:

Be it remembered, that at a Circuit Court of the United States of America, in and for the Western Division of the Eastern District of Arkansas, begun and holden on Monday, the Third day of April, Anno Domini, One Thousand Nine Hundred and Eleven, at the United States Court Room, in the City of Little Rock, Arkansas, the Honorable Jacob Treiber, Judge presiding and holding said Court, the following proceedings were had, to-wit: May 11, 1911:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean.

Now on this day comes the Complainant by its Solicitors, Moore, Smith & Moore, Esqs., and also come the Defendants, by their Solicitors, Joseph M. Hill and James H. Harrod, Esqs., and thereupon said cause having been argued and submitted upon the evidence, and stipulations on file and of record in said cause, and having been taken under advisement at a former term of this Court and the Court being well and sufficiently advised in the premises

It is accordingly ordered and decreed that the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, as Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean and each of them, their agents, employees and successors as well as all other persons, patrons of Complainant, either in the shipment of freight or as passengers, or as passengers between stations on Complainant's road in the State of Arkansas, are hereby perpetually enjoined from enforcing or attempting directly or indirectly, by any suit, or in any manner whatsoever, to enforce against the Complainant, its officers, agents, employees or servants any of the provisions of Standard Freight Distance Tariff No. 3 and amendments thereto adopted prior to the institution of this action, prescribing the rate or rates for the transportation of classes and commodities or any provision in said tariff whereby any of said rates shall be continued in force, or from enforcing or attempting, directly or indirectly, by suit or in any other manner whatsoever, to enforce against Complainant, its officers, agents or

servants, any of the provisions of an Act of the General Assembly of the State of Arkansas, entitled, "An Act to Amend Section 6611 of Kirby's Digest of the Statutes of the State of Arkansas, By Fixing Passenger Rates in this State, and For Other Purposes," approved February 9, 1907, or to enforce the provisions of any other Act or Acts of the Legislature of said State, providing penalties for non-compliance by Complainant with the provisions and requirements of said Standard Freight Distance Tariff No. 3, and amendments thereto as aforesaid, or the Act of the Legislature of the State of Arkansas, fixing passenger rates in said State.

It is further ordered that the costs incurred by Complainant and Defendants, respectively, in procuring the attendance of witnesses before the Master and in payment of the fees of stenographers in the recording of said testimony, be borne by the Complainant and the

Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, and that neither party recover from the other therefor; that all remaining costs including Master's fees, the Complainant pay one-fourth and the Defendants, Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners aforesaid, pay one-half, the other one-fourth to be paid by Complainant in case No. 1637, the payment of said costs to be recovered by execution to be issued by the Clerk of this Court upon application of any party in interest.

It is further ordered that the Bond for injunction filed by the Complainant herein be released and the Sureties thereon discharged from liability.

And the Court hereby retains and reserves unto itself jurisdiction of the subject matter of this suit and of all parties hereto, to the end that such other and further orders and decrees may be made herein as may become necessary by reason of any changed conditions as to the facts, equities or rights that may hereafter take place or arise.

(Signed)

JACOB TREIBER, *Judge*.

And on the same day the following opinion of Court was filed:

By stipulation of counsel and order of Court, the opinion of Court here referred to is found at page 5957, in record on appeal from this Court to the Supreme Court of the United States in case of St. Louis, Iron Mountain and Southern Railway Co. vs. Robert P. Allen et al., &c., No. 1637.

488 And on June 26, 1911, the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George McLean.

Come the parties by their respective Solicitors and file stipulations as follows:—

"It is here agreed and stipulated between Counsel representing all the parties in these causes, that the testimony in the two cases were taken together and that the same was heard and submitted on the combined testimony as one case; and it is further agreed that the transcript of the testimony and opinion of the Court transmitted by the Clerk of this Court to the Supreme Court of the United States in the case of St. Louis, Iron Mountain & Southern Railway Company vs. Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, shall be treated and considered in all respects as the transcript and record of the testimony taken in the case of St. Louis Southwestern Railway Company vs. Robert P. Allen et al., and that said transcript and testimony and opinion of the Court so transmitted shall be used, considered and treated as the record in the above cases.

(Signed)

MOORE, SMITH & MOORE.

Counsel for Plaintiff.

489

JOSEPH M. HILL,

Counsel for Defendants."

It is accordingly ordered that the Clerk in making up the transcript of the record in these causes, make it up in conformity with the above stipulation.

(Signed)

JACOB TREIBER, *Judge.*

And on the same day the following proceedings were had, to-wit:—

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas.

Now on this day the Defendants here applying for an appeal to the Supreme Court of the United States from the final decree in this cause, the Complainant being present by its Solicitor and the Court purposing to grant said appeal, as the Defendants are entitled thereto, and desiring to preserve the status quo pending the determination of said appeal in the Supreme Court of the United States,

It is accordingly ordered that the Court Tariff heretofore put in

force under the orders of this Court during the pendency of this proceeding be continued and in force during the pendency of this appeal.

(Signed)

JACOB TREIBER, *Judge*.

And on the same day the following proceedings were had to-wit:—

490

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas, and Henry Leigh and George L. McLean.

In this cause come all parties by their Counsel and it appearing to the Court that Henry Leigh and George L. McLean, Defendants, have been invited to join in the prayer for appeal herein and have declined to do so, it is by the Court by consent of the said Henry Leigh and George L. McLean, and by consent of all parties to this cause ordered that said Henry Leigh and George L. McLean are severed from this cause and from the appeal prayed herein.

(Signed)

JACOB TREIBER, *Judge*.

And on the same day the following proceedings were had, to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

v.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas.

Now on this day come the Defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas, and file herein their assignment of errors, and present a petition for an appeal to the Supreme Court of the United States from the final decree herein, and also present a bond in the sum of Five Hundred Dollars (\$500.00) conditioned as required by law with good and approved security.

It is ordered by the Court that the petition for an appeal, assignment of errors and appeal bond be made a part of the record, and that the appeal be allowed and bond approved; and it is ordered that a certified transcript of the record and all proceedings herein be transmitted to the Supreme Court of the United States; and it further being made to appear to the Judge that the Clerk of this Court will be unable owing to the size of the record, to prepare a transcript within thirty days from the date of signing the citation: it is therefore ordered that the time for filing the transcript with the

Clerk of the Supreme Court of the United States be enlarged until the Second day of October, 1911.

Dated this 26th day of June, 1911.

(Signed)

JACOB TREIBER, *Judge*.

Which assignment of errors is as follows:—

492 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY and WILLIAM F. McKnight, Railroad Commissioners of the State of Arkansas, Defendants.

Assignment of Errors.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, constituting the Railroad Commission of the State of Arkansas, Defendants in the above entitled cause and aver that in the record and proceedings herein that there has been manifest errors committed in this, to-wit:

1st. The Court erred in not sustaining the motion to dissolve the temporary injunction herein, which motion was filed and considered by the Court prior to taking the testimony herein, on the ground therein set forth that the complainant had filed this bill in equity in the United States Circuit Court, asking relief against freight rates promulgated by the predecessors of the present Railroad Commissioners, without first praying relief from the Commission, which was authorized and required by law to grant relief against unreasonable, unremunerative or confiscatory freight rates.

2nd. The Court erred in not dismissing the bill of Plaintiff on final hearing because the evidence showed that the freight rates embraced in Standard Distance Freight Tariff No. 3, sought to be enjoined herein, had been in force with only minor changes made from time to time and those not materially affecting the revenue of the Plaintiff, for a period of six years prior to the filing of the suit herein, and the complainant did not before filing this suit apply to the Railroad Commission for relief against any of said freight rates as unjust, unreasonable, unremunerative or confiscatory; when the evidence showed that the scheme of freight rates embraced in said tariff were originally put in force in the year 1900, subsequently re-enacted in 1903, and when put in force the Railroad Commission stated and declared to the Plaintiff and other carriers affected thereby that if on fair test of said rates, in whole or in part, they proved to be unjust, unreasonable, unremunerative

493 or confiscatory, that relief would be granted by the Commission upon proper showing of such facts.

3rd. The Court erred in not dismissing the bill on final hearing because the evidence shows that since 1900 the general scheme of

freight rates sought to be enjoined herein has been in force under order of the Railroad Commission and the whole body of freight rates sought to be enjoined, save and except minor changes made from time to time which did not materially affect the revenue of the plaintiff, had been in force since 1903 and the plaintiff and other carriers had acquiesced for said period of time in said scheme of freight rates, which were embraced in Standard Distance Freight Tariff No. 3, complained of in the bill herein.

4th. The Court erred in finding, as stated in the opinion of the Court, that the evidence showed an increased cost of operation for ten years prior to the filing of this suit, and that rates that had been remunerative ten years prior to its filing would no longer be so on account of increased cost of operation, and on such account that there was no acquiescence in the plaintiff in submitting to the schedule of freight rates; when the evidence shows that the increased efficiency of locomotives, cars and tracks and other similar causes had rendered the cost of carrying freight less than at the beginning of the ten years period referred to by the court and less than at any prior period.

5th. The Court erred in holding that the reduction by the Legislature of passenger rates from three cents to two cents per mile was an excuse for the complainant to seek relief in the Federal Court prior to applying to the Railroad Commission for relief therein against the freight rates, because under the law the Railroad Commission is authorized, upon proper showing, to increase the freight rates so as to compensate the plaintiff for its loss in passenger rates, if any loss occurred on account of said Legislative reduction of the passenger rates.

6th. The Court erred in its decree in adjudging and decreeing that the freight rates in Standard Distance Tariff No. 3 and passenger rates fixed by the General Assembly of 1907 were confiscatory and would not afford complainant fair and reasonable return upon its property, and erred in decreeing that a compliance with said freight and passenger rates would be taking the property of the complainant without due process of law, because the evidence shows that said freight and passenger rates are reasonable and compensatory and that they do afford the complainant a fair and reasonable return upon the value of its property invested in intrastate traffic.

494 7th. The Court erred in making perpetual the temporary injunctions heretofore granted in this case and enjoining these defendants from enforcing Standard Distance Freight Tariff No. 3, or any rate or schedule therein, and from enforcing the passenger Rate Act of 1907 and particularly erred in enjoining any rates in said Standard Freight Distance Tariff No. 3, as many, if not all, of said rates are reasonable, just and compensatory.

8th. The Court erred in not dismissing plaintiffs' bill because plaintiff failed to establish by clear and decisive evidence that the intrastate freight and passenger rates sought to be enjoined were confiscatory and in holding upon the evidence offered by the plaintiff that said rates were confiscatory when said evidence was based wholly on opinion testimony without sufficient data upon which an intelli-

gent opinion could be based and said evidence was not of that decisive and clear character which is required to satisfy a court that rates promulgated by a state were confiscatory.

9th. The Court erred in not dismissing the plaintiffs' bill because the plaintiff had not overcome the presumption that the rates established by the State were reasonable and compensatory by a preponderance of the testimony.

10th. The Court erred in not dismissing the bill of plaintiff because the preponderance of the testimony established the fact that the freight and passenger rates sought to be enjoined were compensatory and earning the complainant a fair return on its property.

11th. The Court erred in sustaining the plaintiffs' bill upon the evidence offered by the plaintiff, when it was shown in the evidence that better testimony than that offered was obtainable by the plaintiff in the form of detailed statements of revenue derived from local and through freight trains, and detailed statements of the expenses of local and through freight trains and the amount of state and interstate traffic carried respectively on the local and through freight trains; That the plaintiff instead of resorting to the best evidence to ascertain the relative cost of state and interstate traffic produced only opinion testimony, which was of insufficient probative force to overcome the presumption of the validity of the rates established by the State when better and more reliable testimony could have been produced by the plaintiff and was in its possession and control.

12th. The Court erred in holding the passenger rates to be confiscatory when the evidence shows that the complainant voluntarily made passenger rates equal and less than those fixed by the State and the plaintiff carried a large volume of passenger traffic on rates voluntarily made by it and other carriers on rates as low
495 as, and in many cases, lower than, those fixed by the State herein complained of.

13th. The Court erred in holding the freight rates to be confiscatory when the evidence shows that the complainant voluntarily made freight rates equal and less than those fixed by the State, and the plaintiff carried a large volume of freight traffic on rates voluntarily made by it and other carries on rates as low as, and in many instances, lower than, those fixed by the State herein complained of.

14th. The Court erred in finding that the period of six months ended December 31st, 1907, fairly represented the earnings and expenses of the plaintiff, and further erred in not holding that the revenue and expense of October, 1907, fairly represents one-sixth of said period.

15th. The Court erred in not charging the plaintiff with a fair annual rental for the use of the Bunch elevator, when the evidence shows that said property had a fair rental value of \$20,000 per year and the plaintiff only charged \$1.00 to its tenant per year rental therefor.

16th. The Court erred in holding that the division of expense

apportioned to Arkansas by the plaintiff for the repairs of tools and machinery was fair.

17th. The Court erred in not deducting from operating expenses the fine of \$10,000.00 and costs imposed on the plaintiff for illegally giving free passes to members of the Legislature.

18th. The Court erred in charging the expense of the Memphis Terminals and the portion of plaintiff's road in Tennessee to the expenses incurred in Arkansas.

19th. The Court erred in charging all the expense of the Fort Smith Terminals to the Arkansas expenses.

20th. The Court erred, in sustaining as proper, salaries paid by the plaintiff to lobbyists, and salaries and fees paid attorneys outside of Arkansas.

21st. The Court erred in charging any part of the expense incurred for the leased line known as the Paragould trackage to intrastate traffic when the evidence shows such expense to be incurred wholly for interstate traffic.

22nd. The Court erred in charging the rental of the Van Buren Bridge to the Arkansas expense, particularly any part thereof to the intrastate expense.

23rd. The Court erred in holding the plaintiff road was efficiently operated.

24th. The Court erred in apportioning the property of the plaintiff in the state between the intrastate and interstate traffic on the revenue basis in order to ascertain the proportion of said property used in intrastate business.

25th. The Court erred in the bases adopted for apportioning expense between intrastate and interstate traffic.

496 26th. The Court erred in apportioning the miscellaneous expenses on the revenue basis.

27th. The Court erred in declaring in the opinion that the State contended for a division of property and expenses on the "ton mile basis".

28th. The Court erred in finding that the intrastate freight rates were only 50% higher than the interstate rates, when the undisputed evidence showed that the revenue per ton per mile under Standard Distance Freight Tariff No. 3 produced 98% more revenue per ton per mile on the Iron Mountain Railway Company than the interstate traffic produced per ton per mile and on the St. Louis-Southwestern Railway Company, 141% more per ton per mile.

29th. The Court erred in using the revenue basis for dividing any expenses and particularly without allowing for the excess of at least 50% which the Court found the State revenue was higher than the interstate revenue; the evidence shows that by using the revenue as a factor without making allowances for the difference between the two that the state expenses are burdened unduly in proportion to the excess of the State revenue over the interstate revenue.

30th. The Court erred in not adopting as a whole the plan of division of expense presented by the State, which said basis of division was sustained by preponderance of the testimony as being

the best basis for fairly apportioning the expense between intrastate and interstate traffic.

31st. The Court erred in not accepting the results of the statistics obtained from the test months which were put in evidence by the complainant. The evidence shows that October, 1907 was a fairly representative month of the six months period introduced in evidence by the Iron Mountain Railway Company; that October, 1908 was fairly representative month between state and interstate traffic on the St. Louis-Southwestern and further the evidence shows that the plaintiff was estopped from questioning that said months are fairly representative for the purposes used by the State.

32nd. The Court erred in charging to interstate business only 40% of the expense of the local trains when the evidence shows that on the Iron Mountain it should be about 73% and on the St. Louis-Southwestern about 68% of the expense of the local trains is chargeable to interstate freight business and said finding of 40% was not supported by the evidence.

33rd. The Court erred in dividing Maintenance of way expenses on a revenue basis and particularly in not making allowances for the difference between the intrastate and interstate revenue when using the revenue as a factor in dividing said expense.

34th. The Court erred in its division of expense between local and through trains in charging 50% extra to yard locomotives as against the local train and 75% additional for local locomotive mileage when the evidence shows much lower percentage should be used to equalize them.

35th. The Court erred in the division of the expense of the Maintenance of Equipment of freight cars in charging 25% extra to the local trains for starting and stopping and 13½% for terminals handling when the evidence shows that much lower percentage should be charged for said causes. The Court also erred in this item in estimating that the through trains stop every thirty five miles as against five miles to the local trains: The Court also erred in this item in not charging transstate and interstate traffic with the cost of starting and stopping freight cars and in making different allowance for interstate and intrastate traffic, when the evidence shows that this is an element of expense from the physical starting and stopping of freight cars unconnected with the class of traffic carried in said cars.

36th. The Court erred in not apportioning general expenses according to the plan adopted by the State:—The Court particularly erred in charging all of these expenses on the basis of the supervision in Maintenance of Equipment and Transportation only, whereas, the evidence shows a proper share of such expenses should be charged to the Maintenance of Way and all of the other expenses.

37th. The Court erred in dividing the item of Hire of Equipment on the revenue basis and erred in charging an additional 30% to local traffic when the evidence shows there is no relation between the revenue and said item of expense and there is no evidence to show that 30% or any other percentage should be added to local traffic for this item of expense.

38th. The Court erred in the basis adopted for apportioning station expenses.

39th. The Court erred in finding various omissions from the expenses apportioned to the State in the State's plan of dividing expenses between intrastate and interstate traffic and particularly erred in finding that the dead weight on local trains exceeded the dead weight on through trains 14%, and particularly in finding that for all such alleged omission that 8½% should be charged to the local trains, when the evidence fails to show any basis for such alleged omissions or such percentages as found by the Court.

40th. The Court erred in the basis adopted for apportioning fuel and locomotive expenses and in the basis adopted for "other train expenses".

41st. The Court erred in charging the State passenger traffic with 10% greater than the interstate passenger traffic, when the preponderance of the testimony shows interstate traffic is the most expensive.

498 42nd. The Court erred in holding that the St. Louis-Southwestern freight and passenger traffic was more expensive than the Iron Mountain's freight and passenger traffic.

43rd. The Court erred in finding the extra expense of intrastate traffic over the interstate freight traffic on the Iron Mountain Road was 210% and on the St. Louis-Southwestern 250%, when the evidence shows that at the outside the extra expense of such freight traffic is less than the greater percentage of the revenue per ton per mile of the intrastate over the interstate revenue.

44th. The Court erred in holding that the plaintiff was entitled to earn 6% interest on the value of its property and 1.5% surplus and that a return of less than 7½% on the value of its property devoted to the intrastate traffic was confiscatory.

45th. The Court erred in not holding a return on the plaintiffs' investment equal to the rate of interest prevailing on Railroad securities was compensatory, which rates of interest the evidence shows to have been a little less than 4½% on Railroad securities in Arkansas.

46th. The Court erred in retaining jurisdiction of this cause for any other purpose than to permit these defendants to show a changed situation which might relieve them of the injunction.

Wherefore for the errors aforesaid, and each and every of them and many more apparent in the face of the record, the defendants Robert P. Allen, George W. Bellamy and William McKnight, Railroad Commissioners of the State of Arkansas, pray for a reversal of the decree aforesaid and that the Court be directed to enter a decree dismissing plaintiffs' Bill of Complaint and such other relief as equity and good conscience will show the defendants entitled to receive.

JOS. M. HILL.

JAMES H. HARROD,

Solicitors for Said Defendant Railroad Commissioners.

Dated this June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Prayer for Appeal is as follows:

499 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Plaintiff,
vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT,
Railroad Commisisoners of the State of Arkansas, Defendants.

Prayer for Appeal.

Now comes Robert P. Allen, George W. Bellamy, William F. McKnight, Railroad Commissioners of the State of Arkansas, defendants in the above entitled cause, conceiving themselves to be aggrieved by the decision herein rendered on the 3rd day of May, 1911, wherein the Court made perpetual the temporary injunction hereinbefore issued and found, adjudged and decreed that the freight rates embraced in Standard Distance Freight Tariff No. 3, and intrastate passenger rates enacted by the Act of the General Assembly of Arkansas of 1907, were confiscatory and the keeping of the same in force was taking the property of the plaintiff without due process of law; and prays an appeal from the said final decree of the Circuit Court of the United States for the reasons specified in the Assignment of Errors, which is filed herewith, and prays that this appeal may be allowed and a transcript of the record, proceedings and papers upon which said decree was made, duly authenticated, be sent to the Supreme Court of the United States.

JOS. M. HILL,
JAMES H. HARROD,
Attorneys for Defendants.

Dated this 26th day of June, 1911.

The petition for appeal is hereby granted and the appeal allowed, this 26th day of June, 1911.

JACOB TRIEBER,
District Judge, Presiding in Circuit Court.

500 Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

Which Bond for Appeal is as follows:

501 In the United States Circuit Court, Eastern District of Arkansas, Western Division.

ST. LOUIS-SOUTHWESTERN RAILWAY COMPANY, Plaintiff,

VS.

ROBERT P. ALLEN, GEORGE W. BELLAMY, WILLIAM P. MCKNIGHT,
Railroad Commisisoners of the State of Arkansas, Defendants.

Bond for Appeal.

Know all men by these presents:

That we, Robert P. Allen, George W. Bellamy, and William F. McKnight, as principals, and John W. Crockett as sureties, are held and firmly bound unto the St. Louis Southwestern Railway Company in the sum of Five Hundred (\$500.00.) Dollars to be paid unto the said St. Louis Southwestern Railway Company, its successors and assigns; to which said payment well and truly to be made we bind ourselves, our heirs, executors and administrators, jointly and severally by these presents; this obligation is upon this condition:

Whereas, the above named Robert P. Allen, George W. Bellamy, and William F. McKnight have prosecuted their appeal to the Supreme Court of the United States to reverse the decree rendered in the above entitled cause by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof; Now if the above named Robert P. Allen, George W. Bellamy, and William F. McKnight shall prosecute their said appeal to effect, and answer all costs if they shall fail to make good their plea, then this obligation to be void, otherwise to remain in full force and virtue.

Given under our hands and seals this 26th day of June, 1911.

R. P. ALLEN.

GEO. W. BELLAMY.

W. F. MCKNIGHT.

JNO. W. CROCKETT.

The above bond is hereby approved and ordered to be filed and made part of the record.

(Signed)

JACOB TRIEBER, *Judge.*

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

502 And on the same day the following proceedings were had,
to-wit:

No. 1636.

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

V.

ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. MCKNIGHT, Railroad Commissioners of the State of Arkansas.

Come the Defendants Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Ar-

kansas, by Joseph M. Hill and James H. Harrod, Esqs., their Solicitors, and file their citation which is duly signed by the Judge of this Court and service of the same duly accepted by Moore, Smith & Moore, Esqs., Solicitors of Record for the Complainant in this cause. Which citation is as follows:

503 UNITED STATES OF AMERICA, ss:

The President of the United States to the St. Louis Southwestern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's Office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellees to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge*.

Service of the above Citation this day acknowledged.

MOORE, SMITH & MOORE,

Solicitors for the St. Louis Southwestern Railway Company.

June 26th, 1911.

Endorsed: Filed June 26, 1911. W. P. Feild, Clerk.

503½ And on Sept. 27th, 1911, the following proceedings were had, to-wit:

ST. LOUIS SOUTHWESTERN RAILWAY COMPANY

vs.

ROBERT P. ALLEN, GEORGE W. BELLAMY, and WILLIAM F. McKNIGHT, Railroad Commissioners of the State of Arkansas.

It appearing from the statement of the Clerk of this Court that it will be impossible for him to complete a transcript of the record in this cause in time to file the same with the Clerk of the Supreme Court of the United States on the second day of October, 1911,—the day to which it was made returnable by me, when the appeal was granted and the Citation signed by me—

It is therefore ordered by me that the time for filing the transcript of the record in this cause with the Clerk of the Supreme Court of

the United States is hereby extended until the 12th day of October, 1911.

(Signed)

JACOB TRIEBER,

U. S. District Judge for the Eastern District of Arkansas.

September 27th, 1911.

504 UNITED STATES OF AMERICA,

Western Division of the Eastern District of Arkansas:

I, W. P. Feild, Clerk of the Circuit Court of the United States for the Western Division of the Eastern District of Arkansas, in the Eighth Circuit, hereby certify that the foregoing writings annexed to this certificate are true, correct and compared copies of the originals remaining of record in my office, and constitute a true copy of the record, assignment of errors, and of all proceedings in case of St. Louis Southwestern Railway Company vs. Robert P. Allen, et al., Railroad Commissioners of the State of Arkansas.

In witness whereof, I have hereunto set my hand and the seal of said Court, this 27th day of September, in the year of our Lord, One Thousand Nine Hundred and Eleven, and of the Independence of the United States of America, the One Hundred and thirty-sixth.

Attest:

[The Seal of the Circuit Court, Western Division of East. Dist. Ark., U. S. A.]

W. P. FEILD, *Clerk.*

505 UNITED STATES OF AMERICA, ss:

The President of the United States to the St. Louis Southwestern Railway Company, Greeting:

You are hereby cited and admonished to be and appear at the Supreme Court of the United States at the City of Washington within thirty days from date of this writ, pursuant to an appeal duly allowed by the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, and filed in the Clerk's office of said Court on the 26th day of June, 1911, in a cause wherein Robert P. Allen, George W. Bellamy and William F. McKnight, Railroad Commissioners of the State of Arkansas are appellants and you are appellee, to show cause, if any, why the decree rendered against the appellants as in said appeal mentioned, should not be corrected, and why speedy justice should not be done in their behalf.

Witness the Honorable Jacob Trieber, District Judge presiding in the Circuit Court of the United States for the Eastern District of Arkansas, Western Division thereof, this 26th day of June, 1911.

JACOB TRIEBER, *Judge.*

Service of the above citation this day acknowledged.

MOORE, SMITH & MOORE,

Solicitors for St. Louis Southwestern Railway Company.

June 26th, 1911.

Endorsed: Filed June 26th, 1911. W. P. Feild, Clerk.

506

In the Supreme Court of the United States.

No. 814.

ROBERT P. ALLEN et al., Railroad Commissioners, Appellants,

v.

THE ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, Appellees.

Stipulation.

It is stipulated by counsel that the following parts of the record in the above entitled cause be not printed:

1. Exhibit A to the complaint, being Standard Freight Distance Tariff No. 3, found at pages 43-99 of the record.

It is further stipulated that either party may cause twenty-five copies of this exhibit to be filed with the printed record and treated as a part thereof.

2. Exhibit A to the decree herein, being "Court Tariff" found at pages 372-421.

It is further stipulated that either party may cause twenty-five copies of this exhibit to be filed with the printed record and treated as a part thereof.

3. The affidavits presented to Judge Van Devanter for preliminary injunction shall be omitted, with the right to either party to hereafter publish any part of the same that may be desired by such party and either party may use any part of said affidavit in their brief with the same effect as if it were printed, said affidavits being found at pages 138-369.

4. Any part of the record omitted from being printed under this stipulation may, by either party be hereafter printed or otherwise treated as a part of the record.

5. If either party shall file any of the exhibits or use any part of the affidavits presented to Judge Van Devanter or any other matter herein referred to, in their brief in said case, they shall notify opposing counsel thereof at least twenty days prior to the date the case is set for submission.

Given under our hands this 24th day of October, A. D. 1911.

J. M. HILL,

Attorneys for Appellants.

J. M. MOORE,

Attorney for Appellees.

508

[Endorsed:] File No. 22,890. Supreme Court U. S., October Term, 1911. Term No. 814. Robert P. Allen et al., Commissioners etc., Appellants, vs. The St. Louis Southwestern Railway Company. Stipulation as to printing record. Filed October 31, 1911.

Endorsed on cover: File No. 22,890. E. Arkansas C. C. U. S. Term No. 814. Robert P. Allen, George W. Bellamy, and William F. McKnight, Railroad Commissioners of the State of Arkansas, appellants, vs. The St. Louis Southwestern Railway Company. Filed October 6th, 1911. File No. 22,890.